THE CANADIAN SERIES

FIRST YEAR AT SCHOOL

PRIMARY TEACHER'S MANUAL

SINCLAIR.

WARWICK & SONS

PRICE 50 CENTS.

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Clara L. Holt

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FIRST YEAR AT SCHOOL,

OR

BLENDING OF KINDERGARTEN WITH PUBLIC SCHOOL WORK.

A MANUAL FOR PRIMARY TEACHERS.

BY

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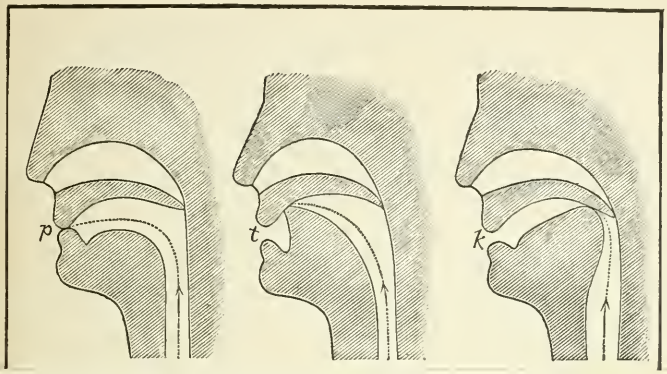

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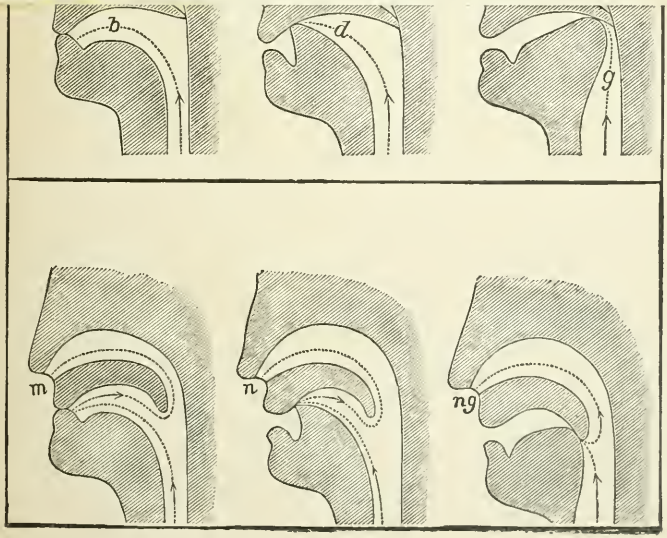

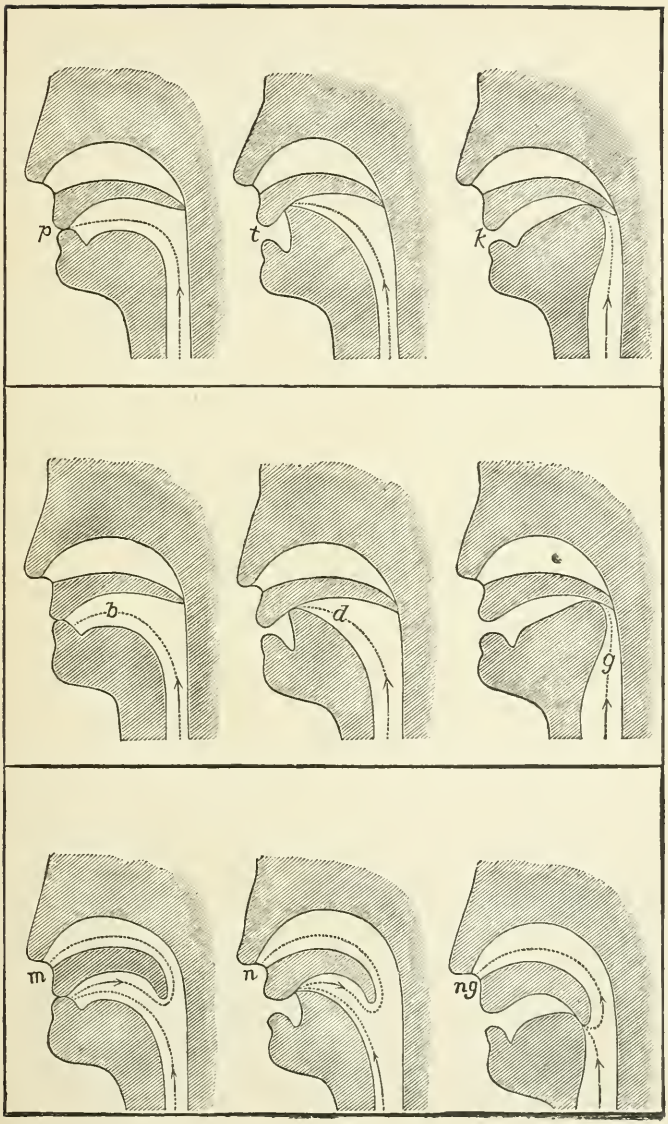
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PREFACE.

The reader will find nothing in the following pages which has not been submitted again and again to the tests of actual experience and careful criticism. For a number of years the author has devoted his entire time to the training of teachers and the supervision of primary grades.

In the oversight of four hundred children who are putting in their first year at Public School, and the majority of whom come directly from the Kindergarten, he has had unusual opportunities of observing the results of Frœbel's methods of instruction.

He has also been able to study the best means of blending Kindergarten methods with methods of the Public School in order that the children may pass in easy gradation from one to the other.

Again, in studying the requirements of those pupils who had not received Kindergarten training, he has had an opportunity of applying such Kindergarten methods as can profitably be introduced into Public Schools.

The methods are specially adapted to graded schools, but the wants of rural schools have also been kept in mind.

To be *helpful* rather than to be *original* has been the aim throughout. While some of the methods are the outgrowth of observations at Toronto, Oswego and Cook Co. Normal Schools, the author humbly hopes that the enthusiastic searcher after truth will be able to pronounce the greater part of the work not only *new* but *good.*

Within the narrow limits of such a book it has been necessary simply to *state* methods without attempting in any way to defend them, and the author must rely upon the charity of his fellow-teachers to give the methods a fair trial before condemning them. Realizing that it is always better to teach from a *principle* than from a *copy,* he has made the type lessons very short. They are intended to be *merely suggestive.*

He takes pleasure in acknowledging his indebtedness to Dr. Sheldon, Prin. Oswego N. and T. S., for phonic plate, page 3 (the frontispiece is referred to here); to Miss Walter, Oswego N. and T. S , for cabinet collection, page 84; to Mrs. Newcomb, Kindergarten Supervisor, Hamilton, for part of sequence, pages 88 and 96 ; and to all others who have kindly aided in the preparation of this work.

FIRST YEAR AT SCHOOL.

To the primary teacher is entrusted the most arduous and, at the same time, the most responsible of all school work. She stands at the very starting point of school life, ready to *switch* the child off on a side track, where he soon comes to a hopeless standstill, or to guide him upon the main line to a glorious destiny. First impressions are the most lasting, and, during the first year, the pupil decides whether school is to be to him a happy home or a hateful prison; whether the object of his endeavor is to be the development of strength—physical, mental and moral, or the cramming of the mind with a mass of indigestible facts, as useless as they are distasteful.

There are few sadder sights than that of a primary school where sixty, eighty, or perhaps a hundred children are huddled together in a dingy, unventilated room, and placed under the charge of a nervous, over-worked, half-trained teacher, to be driven and cowed and deadened until the last vestige of individuality has disappeared. Such a state of affairs, which, in this enlightened age is still unhappily too common, is largely due to a mistaken *public sentiment*, in regard to two questions:—

1st. The number of children that should be placed in a primary grade.

2nd. The necessary qualifications of a primary teacher.

Forty children are the maximum for efficiency in a primary grade. The Kindergartener finds it impossible to train more than twenty or twenty-five, and surely the methods should not be so different the follow-

ing year as to make it possible for the teacher to train *three times* that number. In order to do efficient work the individuality of each child must be studied and this cannot be done in a large class. Better results will be attained by putting a primary class of sixty children on half time, to teaching thirty forenoon and afternoon, than by taking the whole sixty at once.

The teacher who is compelled to take charge of more than forty children must spend very much of her time in preserving order, for, unless very carefully watched, fifty children will make twice as much noise as forty. The amount of work done by the teacher cannot be judged by the number of pupils she has in her room. It is one thing to keep pupils quiet and quite another to educate them, and the latter is by far the harder task.

To plead for smaller classes is not to ask for easier but for more efficient work. The best Primary Teachers seldom stand the strain for many years, and do not generally receive more than a mere pittance for their services. They continue teaching because they love the work, and have caught something of the spirit of the gifted Agassiz, who said he had not time to make money. To the born teacher there are two great inducements in this work—one that she will live in the memories of her pupils, the other that the world will be better for her having lived. Such a teacher will work harder with thirty than with sixty children, for in the former case the very joyousness of her work will cause her to forget the strain on her vitality.

The class should be divided into sections of ten or twelve children, each section being heard by itself in Arithmetic and Reading. In this way the teacher has a

manageable class, she can therefore study the special needs of each pupil, and promote from one class to another when the child is ready. The proper time to promote a child is when he is ready to go on, not when the majority of the class are ready. Promotions may be made daily.

Again, so varied and extended are the necessary *qualifications* of a primary teacher, that many prominent educators have been led to the conclusion that the very best teacher should have charge of the lowest grade.

The *perfect primary teacher* should first of all be heartily in love with child nature, and feel herself instinctively drawn to little children. She should possess rare natural gifts, a good voice, a ready hand, and a pleasing address, for by music, and picture, and personal magnetism, she will be able to win the hearts of her pupils. She should be widely read. Although it may not be necessary to be so profound as for advanced teaching, she will find that in order to hold the attention and answer the many questions proposed, she must have an almost inexhaustible fund of information, and be able to draw on it at a moment's notice.

She should know something of heart culture experimentally. She should have sat at the feet of the Great Teacher, not only long enough to value objective methods, but to have learned the great lesson of self-sacrifice. While there should be nothing of creed or dogma in her teaching, she should, by 'wearing the white flower of a blameless life,' exercise a constant, positive influence for good.

Her professional training should have extended over at least one year, and would be all the better for

an additional year in the Kindergarten and Normal School.

She should know something of Psychology, not only theoretically, but practically, *i. e.*, she should have learned to look into the mind and study its operations. One of her greatest duties is to train children to think. She should therefore know what thought is, viz., *the holding of ideas in relation.* Her work will consist in part in the furnishing of the mind with materials for its future operations, and to do this it will be necessary for her to have an intelligent conception of the methods involved in this furnishing. She is thus, at the outset, met with the old question, "How do ideas come into the mind?" a problem which she should have carefully investigated. Every method used should be adapted to the mental condition of the children, and this adaptation requires, on the part of the Teacher, the ability to discern the stage of mental development of the children, and a knowledge of the peculiar nourishment suited to that period of development.

To one who has thus prepared herself for her profession, there is a beauty in it never dreamed of by the untrained teacher. The work possesses an irresistible charm to her, and, as time goes on, she finds it necessary to guard against a fascination which makes her oblivious of all else but school.

At the same time it is not wise for the primary teacher *constantly* to place herself alongside a perfect standard and feel how far short she comes of it. Many good teachers have become so deeply impressed with the importance and responsibility of the work and their own unfitness for it, that they have entered other less responsi-

ble and more remunerative callings, forgetting that their places are apt to be filled by teachers who care nothing for method, fitness or responsibility. She who has an earnest desire to help children, and is able and willing to work, will, in all probability, in the end make a good primary teacher.

The introduction of the Kindergarten has done much to awaken public interest in primary work. A careful investigation of the Kindergarten must convince everyone that the songs, the games, the occupations, the home-like charm, and, above all, the heart culture to be found in it, afford the best gymnasium hitherto offered for children between the ages of four and six years.

It is very doubtful, however, whether the Kindergartener is right in thinking that the average child should continue in such a school after he is six years of age. For children of that age who have had a year of Kindergarten training, the methods proposed in this book will afford as good a gymnasium as the advanced Kindergarten, and at the same time teach them Reading, Writing, etc., a consideration which is of some importance in these days of reaching out after the *practical.* These methods are so objective that the child scarcely notices the transition, and the casual observer, stepping into the room, would conclude that he was in a real Kindergarten. Thus the objection so often urged by Public School Teachers to the restless activity displayed by children coming from the Kindergarten is completely overcome, for with these methods the teacher prefers Kindergarten children to any other. Again, the Kindergarten teacher finds it difficult to teach more than twenty-five children for half a day. By these methods the teacher can teach forty for a whole day.

The first year at school should be a continuation of the previous child life and habits. He has been accustomed to outdoor exercise and freedom, and to a thousand liberties which cannot be afforded him at school. The teacher should bear this fact in mind, and not make the change too abrupt. Wherever practicable, she should introduce anything that will enhance the charm of school life.

> Heaven lies about us in our infancy,
> Shades of the prison-house begin to close
> About the growing boy.

The Primary Teacher will do well to see that the "light of common day" does not too soon break upon the immortal souls under her leadership.

Reading.

This is the most important subject on the curriculum of a Primary grade, demanding more time and attention than any other, and perhaps than all others combined, embracing as it does the subjects of reading, writing, spelling and language.

In no other subject is it so necessary for the teacher to avoid teaching anything which the child will require to *unlearn.* On this account she will find it better at first to "hasten slowly." The stilted, mechanical, hesitating drawl which passes for reading in some schools is largely due to an attempt to cover too much ground at first, and to make children read ready-made sentences containing thoughts of others rather than their own.

During the first half year there should be very little *oral* reading, the time being occupied in (*a*) word recognition; (*b*) language lessons for the purposes of thought

getting and thought expression; (*c*) the expressing of the child's own thought in written form; (*d*) the silent interpretation of his own written thought after a lapse of time; and finally (*e*) the silent interpretation of the thoughts of others from the script page. (*See* pages 14, 23, 24, 43, 66.)

He should then commence oral reading of script, and silent reading of print, until the print is as easy for him as the script.

The child should be taught script entirely and should not attempt print at all for twenty weeks. There is no difficulty in making the method proposed intensely interesting to the little folk. The teacher may find considerable difficulty, however, with parents who, having begun with the alphabet themselves, wish their children to have books, and who, with the very best possible intentions, insist on helping the child prepare his reading lesson at home. The solution of this delicate problem requires much tact on the part of the teacher. A few words of explanation to the parent will often settle the whole question. The teacher may adopt the plan of sending home a slip of paper showing the child's progress during the week. She will find it a good substitute for the much longed-for books. (*See* Page 87.)

Again, in the change from script to print, there is no occasion for great haste.

In order to show how easily and quickly this change can be effected many devices have been resorted to, but while these devices may lessen, they do not overcome the difficulty. The plan of changing from the perfect script to a series of hieroglyphics supposed to be half-way between script and print, is decidedly objectionable.

By the following methods a child can, in one year, learn the First Part, 1st Book Ont. Reader, so as to read it all from print and write it all in script to dictation. It would be as well, however, to postpone the *oral* reading of print until the second year.

A child may know printed words well enough to read a lesson silently, get the thought, and write the lesson in script on his slate, or tell it to you in his own words, and yet not be sufficiently at home with the print to be able to read the lesson orally, without hesitation.

If, then, a child can read all these lessons with good expression when they are written in script on the blackboard, and has been trained to interpret the lessons in print, and to reproduce them both on his slate in picture or in script, and in his own spoken language, he has acquired more power for expressive reading than the pupil who has been hurried to oral reading of print; and as a rule will overtake him in the race before the second year is completed.

It would be better to devote a year and a half to this first book, and to supplement the reading by a number of easy stories from other series. Ten or twelve primary Readers such as Monroe's New Primer, would answer for Busy Work (*See* Page 124) for a section, and thus for a whole grade; they could be secured at trifling expense.

Word Recognition.

The teacher may begin with the words box, fan, cup, dog, etc., taught by the word method. (Lesson I.)

She may next introduce the sentence "I see a dog." (Lesson II.)

The "word and sentence" method may be used in teaching such words as "and." (Lesson III.)

The teacher will use her own judgment as to which method is best adapted to the teaching of the respective words.

She should endeavor so to rivet the attention of the pupil upon the work in hand that the word or sentence will become finally fixed in the mind in such a way that the written form will call up not only the spoken form but the corresponding idea or thought.

At the end of about four months she may begin phonic analysis incidentally. (Lesson V.)

The child should also have had considerable practice in combining sentences from words previously learned. (Lesson IV.)

At the end of the fifth month he should know the twenty phonic sounds, and one hundred non-phonic words of the first thirteen lessons of First Pt. 1st Bk. Ont. Readers. He is then ready to write for himself new words by phonic analysis (Lesson VI), a much easier task than by phonic synthesis.

When he has gained sufficient strength in phonic analysis, lead him to word building by phonic synthesis (Lesson VII), teaching the remaining phonic words of the preceding thirteen lessons.

The teacher should adhere rigidly to some sequence of words, and should always know what words the children have learned.

The following sequence is recommended:—Box, fan, cup, dog, I, see, a, and, cat, the, have, See, on, hat, pig, top, big, is, Is, in, The, boy, Tom, has, he, He, rat, pet, fan, her, his, by, can, Can, mat, red, hand, for,

me, get, well, run, from, hen, to, it, It, my, My, doll, may, May, she, She, this, This, Dash, Yes, No, You, His, we, at, that, That, are, old, men, them, ox, go, no, so, A, do, Do, too, O, sat, fat, pat, let, kid, nut, vat, bat, wet, nuts, sup, pup, put, Let, him, off, pen, not, an, An, pan, man, man's ran, van, fun, gun, bun, rag, nag, bag, lag, Run, log, hog, pot, hot, lot, got, mop, hop, cut, hut, but, gig, fox, bug, mug, hit, set, net, sad, gad, did, lid, into, pin, bud, by Will, pink, Where, tub.

The above list contains all the words in the thirteen lessons previously mentioned, and is fairly satisfactory. The type lessons in this book are based upon it. Were it not for phonic considerations, it would be better to select only such words as are familiar to the child, thus the list for city children would differ from that for country children. The natural science lessons would also afford a valuable addition to the list.

By the preceding method, at the end of thirty weeks, a child of average ability will be able to read and write to dictation any word in the preceding list; he will also be able to discover for himself any phonic word formed from the sounds known by him, and can thus complete the word-recognition of First Pt. 1st Bk. in one year.

The change from script to print, if not attempted for twenty weeks can be easily accomplished, the best results being secured by a gradual change extending over several weeks. (*See* page 41.)

Expressive Reading.

This is the most difficult of all primary work. The teacher should keep from the child as long as possible the impression that reading is different from talking.

She may begin with short conversations, leading the child to talk to her and tell her about his home and objects of interest to him, until he can describe a scene so well that he makes her see it. This will require great tact, labor and patience on the part of the teacher. She may then train him to reproduce stories that she has told him. One of the most valuable results of the language lessons described later on is that they prepare the child for oral reading by furnishing his mind with ideas and training him in the art of expression.

The ideal method for expressive reading would be to teach a single child by the pure sentence method, the teacher writing the child's own thoughts in the child's own words as they were given spontaneously in conversation, and then requiring him to say them over again after the chalk had said them. In this way, without having been taught any individual words, it is probable that at the end of eighteen months he would unconsciously have learned to recognize all the words in his own vocabulary. If, during this time, he also had sufficient vocal drill to remedy all defects in his vocal machinery and render every organ responsive to the will, so that he could produce pure tones, there is little doubt but that he would be able to read with almost perfect expression.

We have neither time nor opportunity to teach reading by this ideal method in the public school, but we can *approach* it in many ways. We can observe the sequence, "ideas first, then words;" we can adopt a vocabulary familiar to the child and we can confine his reading during the first year mainly to *sentences* that are the product of his own thought.

During the second half-year the teacher will have more time to devote to expressive reading of lessons. (Lesson VIII.) It would be better if the children could be supplied with script readers. Toward the end of the year the child's vocabulary will be sufficiently extended to admit of long stories for silent reading. This exercise will aid him materially both in thought getting and thought giving.

On page 43 will be found a simple story of this description. The first chapter is suitable for children who know the thirteen lessons previously mentioned, together with the new words at the head of each chapter. The whole story is suitable for children who have gone through the 1st Prt. 1st Bk. The teacher may compose a dozen such stories, write them on foolscap paper and distribute them to a section for busy work previous to a language lesson similar to the picture lesson described, page 69. Such stories are not intended so much for oral reading as to impress upon the child the fact that he can gain thought through the medium of written characters, also to familiarize him with the forms he already knows, and to furnish him with ideas for his language lesson.

LESSON I.—WORD METHOD.*

Purpose.—To teach to read and write the word "dog."

Plan.—Hold up a toy dog before the class and develop from the child such sentences as—"I see a dog"; "I have a dog"; "A dog can run." By a short conversation awaken interest in the subject.

Draw a picture of a dog on the board and have the children tell you what it is. Under the picture write the word "dog," and tell them this is the word "dog,"' or the chalk has said "dog."

Draw pictures of dogs in various positions, developing such stories (sentences) as: "I see a dog in a box." Rub out the picture of a dog and write the word instead, developing the same story as before. Write the word in new positions, developing new stories. Drill on the word by writing it in a number of places with other words, and having the children find the "dogs" and erase all other words.

Have class take seats and copy the word on the ruled side of their slates, at first following you as you write the word slowly on the blackboard, explaining the process step by step. After this have them copy it from written cardboard.

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*The type lessons, devices for busy work and suggestions are inserted in the *condensed* form, in which they were originally prepared, as notes of *talks* to training class.

The Busy Work is intended to furnish work for the children at the conclusion of the lesson. (See page 85.)

The suggestions are submitted as aids to teachers in teaching lessons similar to the type lesson.

When Busy Work and suggestions are applicable to succeeding lessons, which is generally the case, they are not repeated, as the teacher will experience no difficulty in adapting them.

Busy Work.

Copy the word on slate from script cardboard for twenty minutes. (See page 88).

Draw a picture of the toy dog.

Draw pictures of other dogs from memory.

Draw original pictures, as in lesson, and be prepared to tell story of picture when busy work is examined by the teacher.

Outline with shoe pegs on desk the picture of a dog drawn on the board.

Suggestions.

Slates should be ruled according to directions, page 86.

If you cannot secure a toy object get a good picture or draw one on the board with colored crayon or from a stencil. The picture and the written name should be left on the board for one day at least.

Lists of all the words learned should be kept in view, the phonic words at one end of the board, the non-phonic at the other.

These word ladders should be constantly referred to and should be used for daily drill with the full class.

When the child has learned a number of nouns, have him write them on his slate and place the toys on the corresponding names.

Enliven the lesson by letting the children frighten the "dogs" away by erasing them from the board, etc.

Do not spend too much time in word development, but let the children use both *eyes* and *ears*. The word should be written on the board within five minutes from the time pupils take their places on the floor.

Face the class and write on the board with the right hand.

Always insert punctuation marks, and have the children insert them.

Do not hold a class after the interest begins to flag.

Drill carefully and thoroughly on the word.

The class may answer simultaneously as you point to the name, but do not allow the children to repeat the name several times.

See that the class have long pencils for writing, and that they observe the proper position of the hand.

Do not expect the child to write well at first. All he can do is to *try*. Encourage him.

Do not attempt to teach more than one word per day for the first two months, but teach that one word so thoroughly that it will be as familiar to him as his teacher's face.

Practice drawing the objects in your first year limit until you can draw a picture upon the board very rapidly. If possible every primary teacher should take a course in freehand drawing.

Vary the method very often, *e. g.*, instead of developing the word from the toy, describe the object and let the children guess its name, or tell a story suggesting the name. In developing the word let the children close eyes, feel the toy, and guess its name.

Write a name on the board for review, and have a child describe the object which it represents.

Show a number of toys and have the children close their eyes while you take something away. Let them open their eyes and write on the board the name of the object you removed.

You should write a good, plain, uniform hand, the Spencerian is probably the best. It is well to write in *large* characters on the board when developing the word. The children may practice writing the word in the air before attempting to write it on their slates. This device will also be found helpful in drawing, for it enables the child to become accustomed to the "muscular sweep" required in making outlines.

In tracing make the divisions as *simple* as possible, *e g.*, in writing the letter "u" have five steps and explain each step by itself.

Keep on hand a quantity of foolscap paper, cut in slips, and ruled as in Busy Work, page 87. Let pupils write on these slips with pencils, on Friday afternoons, a story containing the new words learned during the week, and take it home as a sample of that week's progress.

Have lines drawn on blackboard similar to ruling on slates and allowing about two inches for small letters. These lines should be near the bottom of the board at suitable height for a small child to write on when standing up. The lines may be painted upon the board or drawn from day to day with chalk and line, the line being thick cord about eight feet in length. Hang a curtain to conceal a small portion of the blackboard. A picture drawn before school time may thus be kept from view until required.

LESSON II.—SENTENCE METHOD.

Purpose.—To teach to read and write the sentence, "I see a dog." "I see a fan," etc., to a class who know the words "dog," "fan," "cup," thus teaching the combination "I see a."

Plan.—Develop from the children the sentence, "I see a dog."

Write the sentence on the board and tell the pupil that the chalk has told his story. Ask another pupil to tell you what the chalk has said.

Similarly develop and write the sentences, "I see a box," "I see a fan." Drill on these sentences, letting each child read first his own story, and then the other stories.

Write the sentence, "I see a cup," and let the children try to make it out. If they cannot do so, develop the story by holding up the toy.

Rub all out, send class to seats and write on the board the sentence, "I see a dog," the class imitating you as in Lesson I.

Suggestions.

Do not allow the child to read the sentence one word at a time. By a rapid sweep of the pointer indicate that the sentence expresses the one thought. Do not accept rapid reading instead of expressive reading. The child should be kept two days on this lesson.

Adapt busy work of preceding lesson.

LESSON III.—WORD AND SENTENCE METHOD.

Purpose.—To teach to read and write the word "and," introducing it in a sentence.

Plan.—Drill on the words box, fan, cup, dog, I, see, a.

Have the objects on a table and send one pupil to it, asking him to tell you a story about any *two* things he sees on the table. Develop such a story as, "I see a box and a cup," and write it on the board. Continue with such stories as "I see a dog and a fan," etc.

Drill on the word "and."

Busy Work.

Write stories containing "and." Copy the word "and" from the script cardboard.

Arrange the cardboard blocks to make stories containing "and."

Draw pictures of the stories the children have written.

Suggestions.

If the children read mechanically, get them to tell you the story while looking at the objects, until they can read it naturally.

Let one child take the pointer and point to words in succession forming a story, and let the other children tell his story.

Let each child tell you a story about any two things he sees on the table, and write the stories on the board.

Let each child tell you his own story from the board, and afterwards the other stories. Illustrate with objects for expressive reading.

Ask the children to find the new word and tell its name. Write a long story containing all the Nouns known by the children, such as, "I see a cup, and a fan, and a dog," etc. Do not allow the children to read this story orally, but have them bring the articles named and place them in view of the class.

Similarly develop a story from the objects by placing them in certain positions and have children write the stories on the board.

Vary this to suit the size of the class, and the number of words learned.

Do not allow the children to point to the words one by one when reading a sentence.

Do not allow them to begin to read a sentence until you think they are certain of every word in it.

LESSON IV.

Purpose.—To teach expressive reading of short sentences, formed from words known by the child.

Plan.—Have on a table a number of objects, the names of which have been learned by the children. Drill the class on these words. Tell the children that you are going to talk to them with the chalk, and they may answer the questions you ask, or do anything the chalk tells them to do.

Write such a question as—"Where is the cat, Arthur?" Then write Arthur's answer, "The cat is on the table," etc. "Put the cat in the box, James." "Put the rat in the box, Minnie." "Put the hat by the box, Robert," etc. "Where is the cat, John?" etc.

Suggestions.

The teacher should talk as little as possible, and endeavor to impress the fact that writing gives us a new avenue for conveying thought.

The benefit derived from such a lesson varies inversely in the ratio of the number of words spoken by the teacher to the number of words spoken by the class.

Write a word with chalk on each of half a dozen slates. Give the slates to as many pupils. Let these stand on the platform facing the class and having the words exposed. Write a sentence on the board, and let one of the others arrange the six pupils in such a way that the story will be read from their slates.

Sometimes let the children arrange themselves, or let one child arrange them, and the others tell his story.

LESSON V.—PHONIC DISCOVERY.

Purpose.—To lead the child to discover the sound of the letter "s" from the words "*at*" and "*sat*," previously known.

Plan.—Write "*at*" and "*sat*" on the board and drill on them.

Ask a pupil to find something in "*sat*" that is not in "*at*." Let him draw a circle around the letter "s" in "sat," or mark it off in some way.

If this be his first lesson in phonics tell him that we are going to begin to learn parts of words now, that these parts of words are called letters, and that we are going to try to find the sound of this letter (s).

Write a number of words containing the letter "s" on the board and have him point the letter out until he is thoroughly familiar with its form.

Returning to the words "at" and "sat," have the class pronounce both words and develop from them the facts that "*at*" is in both, that the difference is at the beginning of "*sat*," and that it consists of a hissing sound.

Have the class try to find out this sound for themselves by saying the words "*at*" and "*sat*" over and over again slowly and when they think they know it, let them raise the hand and whisper the sound to you.

Have one pupil give it aloud correctly for the class, and then give it yourself.

Draw a diagram on the board showing position of the vocal organs in making the sound. By a looking glass or some other device impress upon the child the importance of a proper use of these organs. (*See* plate on page 3.)

Busy Work.

Have the children copy the letter "s" from the cardboard and write all the words they know that have "s" in them. A number of cardboard or paper letters may be given each child, and he may select all the "s's" from them.

They may take all the words which contain "s" out of their word box. (*See* page 88.)

Draw pictures of things which make this hissing sound.

Suggestions.

After two or three lessons the children will have an appetite for the discovery of the new sound, and the teacher may attack sound discovery almost immediately.

Vary the method by first taking the difference in the sounds of "*at*" and "*sat*" and then the difference in the form of the words.

Slow pronunciation is the secret of successful phonic work. The teacher should train the children to detect sounds by giving such commands as "Put your h-a-n-d-s on your h-e-a-d," "Bring me the b-o-x," etc.

If the child has difficulty in getting a sound correctly from the word given it is well to take another word with a different vowel, *e. g.*, if in learning the sound of "*m*" from "*mat*" the child inclines to the combination "*ma*," he will discover his mistake by trying the word "*men*."

It is sometimes much easier for the child to discover a sound at the end of a word than at the beginning, thus "m" from "hi*m*." It is better to adhere to one type word to be remembered as the one to which a child must refer should he forget the sound.

He should be taught to correct himself not by trying to remember the sound made by the teacher, but by referring to this type word, and rediscovering the sound for himself.

It is well after a few lessons to tell the child that the letters do not *always* have the same sounds.

Show him that in some cases he cannot make the correct sound by itself. He can only do that when he pronounces the word, *e. g.*, in giving the sound of "*t*" in the word "cat," the sound is made almost instantaneously. In pronouncing a word naturally, a child gives its phonic spelling in the most perfect way possible.

Have the child practice making the same sound in rapid succession thus "r-r-r-r-r." Let the pupils give each other sounds to write on the board.

Let the children suggest something which they think resembles the sound, *e. g.*, the sound resembling that made by red hot iron when plunged in water, or that which we make when we drive a cat out of a room, etc. Write the letter on the board, and have the children copy it at their seats.

If the child gives the alphabetical *name* of the letter, accept it, but tell him that what he has said is the *name*, that we shall learn the name by-and-by, but it is the *sound* we want now. It is well to postpone names of letters until the second year. Children seldom require to be taught them in school, having generally been taught the alphabet incidentally at home.

In teaching phonics the teacher will find the following sequence, which contains all the phonics in first part 1st Bk., a good one. After each letter is the word from which the sound is discovered :

s —sat.	h —hat.	l —let.	ff —muff.
f —fat.	r —rat.	g —get.	ck—neck.
p —pat.	c —cat	w—wet.	sh—shed.
ă —at.	n —no.	d —dog.	ch—chin.
t —top.	ŏ —on.	k —kid.	th—thin.
m—mat.	ĕ —pet.	ll—tell.	wh—whip.
v —vat.	ĭ —it.	ss—toss.	ng—ring.
b —bat.	ŭ —nut.		

While the teacher possesses the power by the plan of this lesson to determine the correct position and formation of every sound, it may be of service to her to have these indicated. On this account the following description is submitted :

The nature of the sound depends upon two things : the air from the lungs may be driven against the vocal chords and its force spent in causing them to vibrate, the column

of air above the larynx being thereby put in vibration; or it may be emitted without being converted into *vocality*. In the latter case the air is made audible by a rushing sound given to it on being driven through some compressed opening either of the glottis or of some of the speech organs. When the air is made vocal it is called "tone," or "voice," if not vocal, "breath," or "aspirate."

"s"—In making "s" the throat and lips are open, the teeth separated, the sides of the tongue touch the teeth and the roof of the mouth. The tip of the tongue nearly touches the roof of the mouth just above the front teeth. The breath is softly hissed out through the narrow opening.

"f"—In making "f" the throat and lips are open, the teeth separated. The middle part of the lower lip is placed against the edges of the upper front teeth. The breath is driven out between them.

"p"—In making "p" the lips are pressed tightly together. The breath is compressed in the mouth and allowed to escape with a gentle puff by the sudden separation of the lips.

"ă"—In making "ă" open the mouth and lips wide, keeping the tongue in its natural position, and cause the voice to pass suddenly between the tongue and palate.

"t"—In making "t" apply the edges and point of the tongue to the upper gum, compress the breath and cause it to escape by suddenly removing the tongue.

"m"—In making "m" close the lips, compress the voice and cause it to escape through the nostrils.

"v"—In making "v" the position of the organs is the same as for "f," the *voice* being driven out in the same way that the *breath* was in making "f."

"b"—In making "b" place the organs in the same position as for "m." Close the nasal passages and cause the voice to make a muffled sound. When the lips are opened a gentle puff is produced.

"h"—In making "h" place the mouth in the same position as for "ă" and allow the breath to escape gently.

"r"—In making "r" raise the point of the tongue towards the upper gum and cause the voice to escape so as to make the tip of the tongue vibrate. This sound is not heard before a consonant.

"c"—In making "c" place the back of the tongue in contact with the soft palate, compress the breath and cause it to escape with a slight puff.

"n"—In making "n" place the edge of the fore part of the tongue firmly against the upper gum. Compress the voice and cause it to escape through the nostrils.

"ĕ"—In making "ĕ" place the organs in the same position as for "ă," open the mouth a little wider, enlarge the back cavity by raising the tongue a little higher, and cause the voice to escape suddenly.

"ĭ"—In making "ĭ" arch the tongue and raise it toward the roof of the mouth, the point being depressed and the lips narrowed, the mouth slightly open and the back cavity enlarged. Cause the voice to escape suddenly.

"ŏ"—In making "ŏ" open the mouth widely, round the lips, raise the tongue slightly, and cause the voice to escape suddenly.

"ŭ"—In making "ŭ" open the mouth not quite so widely as for "ă," raise the tongue somewhat and cause the voice to escape suddenly.

"l"—In making "l" place the tip of the tongue against the upper gum and cause the voice to flow over the edges in a pure tone.

"g"—In making "g" place the back of the tongue closely against the soft palate and compress the voice. An effort to produce voice causes a muffled sound in the throat, a clicking sound being made on the separation of the organs.

"w"—In making "w" round the lips and cause the voice to escape so as to blend with the following vowel.

"k"—Is formed exactly like "c."

"d"—In making "d" place the organs of speech in the same position as for "n" and close the nostrils. An endeavor to produce voice without removing the tongue results in a muffled sound being made in the throat, a slight puff being heard on the separation of the tongue and gum.

LESSON VI.—PHONIC ANALYSIS.

Purpose.—To teach to write the new words "sup," "pup," "pen" and "not," by phonic analysis to a class who know all the sounds in these words.

Plan.—Pronounce the word "s*u*p" slowly to the class. Ask them to tell you how many sounds there are in the word.

Ask for the first sound, then the last, and finally the middle sound.

Now let the children write the word on the board.

Drill on the word and develop its meaning, getting stories containing the word, etc.

Proceed similarly with the other words.

Busy Work.

Copy the letters in the words.
Write stories containing the new words.
Copy the new words.
Draw pictures illustrating written stories.

Suggestions.

If the word is the name of an object, as "box," draw the picture on the board, let the children name it, and tell the number of sounds in the name.

Drill on the word after it is written. It does not follow that when a pupil can write a word in this way that he can read the word. After a little practice he will write a dozen new words in a minute, and perhaps the following morning not be able to recognize one of them when written for him.

The great value of this exercise is to train the child to observe and think sounds and to gradually lead him to phonic synthesis.

It is well to drill on the sounds of letters involved in the new words, if there be any doubt as to the child knowing them.

Do not hurry. Let the child think out the sound.

Have a pupil write a letter on the board and other pupils tell him words containing that sound.

LESSON VII.—PHONIC SYNTHESIS.

Purpose.—By phonic synthesis to teach to recognize the words "cup," "sup," "sip," etc., Lesson XVI., 1st Pt., I Bk., and to teach the meanings of these words.

Plan.—Drill on the sounds to be used in the lesson—s, i, b, p, l, c, t, a, u. Write the letters "u" and "p" separated by a dash, thus "u—p," also write the word "up."

Have the class give the sounds separately and make the word "up" by combining the sounds. As they already know the word "up" they will do this immediately, but they should be shown how they could have discovered this word by putting the sounds together.

Similarly by placing the sound "c" before up show how the word "cup" could have been discovered by synthesis, if not previously known.

Apply this method of synthesis to the discovery of the unknown word "sup."

Write "s"—"up" and "sup." Ask children to tell the sound of "s" and of "up." Then have them put the sound of "s" before "up" and find what word they get.

Let them raise the hand and whisper the word to you when they think they know it.

When nearly all have it, let one child give it aloud for the class.

The meaning of "*sup*" may then be taught, but it would be better postponed until after the synthesis of "sip," when the meanings of the two words can be taken together.

Write the combinations of "up" and "ap." Refer to the way in which we got the combination "up" by writing "u" and "p," and have the pupils try to find what they

will get by uniting the sounds of "a" and "p." Have them try the sounds slowly and continue for some time whispering the combination "ap" as before.

If this be too difficult, return to phonic analysis or tell the sound and proceed.

Write "s—ap" and "sap." Have the children give the sound of "s" and of "ap" just learned. Ask them to put the sound of "s" before "ap" and whisper the word.

Having discovered the word, develop its meaning and ask for stories containing it.

Busy Work.

Let the children make new words by putting other consonants before the combination "up," etc., and be able to pronounce the new word when written.

The teacher may write on the board a continued story containing blanks for new words learned, and the children may write the story filling in the words in their proper places.

Suggestions.

Do not hurry the child or help him too much in discovery. If children experience great difficulty in coalescing sounds it is a sign that the previous work has been imperfectly done.

Give a short drill on building words they already know, similar to the method used in accompanying lesson.

Let the teacher give the sounds of some word, (previously learned) slowly, and have the pupils try to put the sounds together and tell the word.

Develop several combinations and get the children to make words by attaching the same consonant to the beginning or end of each, *e. g.*, "ap," "tap," "apt," "an," "tan," "ant."

Let one pupil take the pointer and point to successive letters on the word ladder, and have the others tell the word.

Teach the meanings of words objectively, where possible. Children who have not heard the word "sap," will learn more about its meaning by seeing and tasting sap, than by any amount of explanation.

Avoid spending too much time on word recognition, and not enough on the meaning, otherwise you will send the child away with his mind filled with the idea of the *construction* of the word to the exclusion of its *use*.

If the meaning of a word be already known, try to impart some new information regarding it.

When possible always let the pupil see the word *associated* with other words in a sentence.

The teacher will require to exercise great caution in word building by phonic synthesis, or the children will misspell new words, which they use in conversation, but which are not purely phonic, *e. g.*, writing "cum" for "come."

A child seldom misspells a word which he has learned by the word method. But if allowed to make new words indiscriminately for a couple of weeks by phonic synthesis, he will soon unlearn his spelling of non-phonic words. All experienced teachers who have tried it will undoubtedly grant that pupils will learn word recognition more *rapidly* by the phonic than by any other method, and many good teachers think it better to begin phonics the first week, but there are the following objections to this :—

(*a*) The children must learn a certain number of non-phonic words at an early stage.

(*b*) The nature of the English language is such that the pupil cannot attack a new word, knowing with certainty that he can pronounce it correctly by phonics.

(*c*) Expression is not taught in any sense.

(*d*) The child learns to name words of which he does not know the meaning.

(*e*) He is apt to misspell new non-phonic words.

(*f*) At the beginning phonic synthesis may be too hard for him.

However, in the hands of a thoroughly trained and enthusiastic teacher who follows the method indicated in the preceding pages, these objections will be almost entirely overcome.

It is better not to attempt phonics at first. The child will find the sentence method more interesting; he will learn to write all the letters and to know a number of non-phonic words. He will also acquire strength to grapple with the more difficult problem of phonic synthesis and will be able to take up the work untrammelled by many things which must distract his attention if compelled to begin phonics the first day. After four months of such preliminary drill phonics should *certainly* be introduced.

LESSON VIII.—EXPRESSIVE READING.

Purpose.—To teach to read Lesson XXVII, 1st Prt., I. Bk.—Ontario Readers.

Plan.—Ask the children to open their books at Lesson XXVII and read down to "one" on the next page, with their lips closed.

The following is the paragraph :—"Do you see that girl with the rose-bud in her hand ? She runs out to meet Miss Ross, and give it to her. It is the bud of a red moss rose, and Miss Ross will kiss her for it, and will say to her, What a dear pet you are ! Miss Ross lets Bess have her muff, and also asks her to pin on her cuff, that has come off. And Bess will do it. What a dear girl Bess is ! She does not let a day pass but she does good to some one."

Tell them to raise hands when they come to a word they do not know, and have them show the word to you.

Write all the unknown words on the board, and have the children close their books. Then develop and drill on the new words.

"All open books at the lesson we were at." "Look at the beginning of it." "How far does the first question go, Mary ?" "Ask me the question, Frank." "You may point to the picture of the girl, and ask John the same question, Esther."

"What does the girl do, John ?" "You may tell me what she does, James." "Who can tell me what kind of bud it is ?" "Minnie may tell." "So it is."

"What will Miss Ross do for it, Effie ?" "What will Miss Ross say to her, Herbert ?" "Now I would like some one to tell me the whole story from 'it' down to 'are.' George may tell."

"What does Miss Ross let Bess have, Lillian ?" "What does she ask her to do, Frank ?" "Will Bess do it ?" "Point out the cuff and muff in the picture, everybody."

"You may read from 'Miss Ross' to 'it,' Minnie."

"What kind of girl is Bess, John ?" "Tell me some more about Bess, Esther."

"This is a hard part to understand. If Minnie were Bess, and each boy were a day, what must Minnie do before she lets a boy go past?"

"I know some boys and girls like Bess."

Busy Work.

Pupils may copy difficult words on their slates and make new stories using these words.

They may write the lesson in their own words or copy it on their slates.

They may also draw a picture illustrating the lesson, from book and memory. Let them write the lesson to dictation.

Suggestions.

The accompanying lesson contains only the "dry bones" of a perfect reading lesson. The teacher's very countenance should be radiant with interest in the subject, while each earnest effort should receive a sparkling recognition from her.

She must feel a childlike enthusiasm, which is sure to be contagious.

A child has a unit of energy to expend in a reading lesson. It should be the business of the teacher to see that but a very small fraction of this unit is diverted into any other channel than that of *expression*.

If half the energy be expended in endeavoring to decipher the half-learned words in the sentence and one-fourth in trying to keep the pupil's toes within a hair's breadth of a chalk line, or, worse still, in making no *mistakes* in reading so that he may keep his *place* in his class, the chances are that the other one-fourth will be expended in longing for the time for dismissal from prison to freedom and sunshine.

Never allow a child to attempt to read a sentence without being sure that he knows every word in it. See that the child gets the *thought* of every sentence he reads.

"Saying the words" is of little use. Never allow a primary class to read a sentence simultaneously. They may occasionally read the lesson backward for word drill, although this is a dangerous expedient.

Do not let pupils *speak out* in the class, no matter how eager they are, unless you ask the whole class to answer.

Propound the question before naming the pupil who is to answer.

Insist upon good *position* in Reading. Have the pupil stand on both feet, hold his book in one hand, and speak loud enough for all to hear.

Do not allow the children to point to the words with the finger as they read. They should have had enough blackboard drill on sentences to teach them to glance forward constantly, the voice *following* the eye.

Do not adhere rigidly to any system of class tactics. Vary, by allowing the children to stand in a promiscuous group, in a semicircle, or in two straight lines marked on the floor.

In drilling on the different words, ask the children to find the word in their books as you point to it on the board. Or locate it thus, "Who can tell me the second word in the second line?" When the pupils come to anything in the lesson which is distinctly represented in the picture, have them find it.

Talk about the characters in the story.

Let the children personate the characters in the story, asking questions and receiving answers in the words of the book.

If the child finds difficulty in reading from the *book*, write the story on the board in script, and after he has read it, return to the book.

If a child does not keep the place have him look on the same book with you, and show you the place every few minutes.

Whenever you can develop a sentence from the child do so, *e.g.*, if a child has difficulty with such a sentence as "Tom has ten nuts in an old rag bag," reality will be imparted to it if the teacher shows the child a bag containing ten nuts and develops the sentence from him. This can be carried to an extreme, but the great majority of teachers err on the side of too little reality and too much abstraction. If the pupils thoroughly grasp the thought and have had good training in vocal gymnastics there will be little need of teaching reading by *imitation*. The teaching of reading by imitation is a dangerous expedient, but may sometimes be used with beneficial results.

The teacher must supply her own limitations to the statement that children should read *naturally*, *e. g.*, a pupil when personating Shylock should try to feel and speak for the moment as Shylock felt and spoke.

From Script to Print.

Many primary teachers find the change so easy that the pupils scarcely realize that there is any difference at all in the forms. Others experience more difficulty, and to the latter the following suggestions may be of value. In no case, however, is the change *very difficult*, and it is a mistake for teacher or pupil to get the impression that he has a hard task before him.

The teacher must first be sure that the children thoroughly know the script form and can write it to dictation without hesitation. In nine cases out of ten when the child can do this the change is exceedingly easy to him.

He may then be told that on the tablet and in the book the words are not written exactly the same as he has learned to write them, but that if he watches them closely he will soon learn to make them out just as quickly as when the chalk has said them.

Show him the same word written in script and print and allow him to compare the forms ; then ask him to find the word on the tablet or in his book. The tablet is preferable for class work.

Write a story in script on the blackboard and under each word write the print form similar to interlinear translations.

When the children have examined the story, erase the script and have them write the script story on their slates.

Write a story in print on the board and give the children blocks with the script words on them and let them arrange the story on their desks.

They may translate script into print in the same way.

Distribute books to a section at their seats, and for busy work ask them to read a certain lesson with lips closed and write it on their slates, or draw a picture illustrating the story. When they come up to the class they may read the story in script either from their slates or from the blackboard. They may also tell the story in their own words for language lessons, but it is not well at first to attempt the oral reading of the *print.*

Where the children have learned a number of phonic sounds the printed letter may be written in the phonic ladder alongside the script and the difference pointed out. The pupils may amuse themselves by finding all the letters on a certain page. It is better not to allow them to *print* the letters at all, the results are always disastrous to the script writing.

Do not attempt too many words or letters at first.

CHAPTER I.

STORY FOR BUSY WORK.

New Words in addition to list, page 15.—"Said," "one," "day," "with," "tree," "shall," "drop," "carry."

Said Tom one day to May and Fan, "See the nuts on that big tree!"

"May, go and put on a hat and get one for Fan. Fan, will you get a big box for the nuts? I shall get Dash and we will go off for them. Run!"

May and Fan run and get them.

"See, Tom," said May, "did not Fan get a big box?"

"Yes, it is a big one, May. That is not a big one you have; is it for nuts?"

"No, Tom, you will see."

"Fan! we are off," said Tom.

"Dash! Dash! old boy!"

"Did he go, May?"

"Yes, he is off for that cat; let him go; you will see that he will get to the tree with you, Tom. Dash is the dog to run!"

Tom, May and Fan go on to the tree with no Dash. Tom is on the run, so that he can see Dash, and get him to go with them, for Dash is his pet dog.

May and Fan do not run, so Tom and Dash get to the tree, and Tom has to put the nuts in an old pan, for Fan and May have the box.

"See Fan!" said May, "Tom and Dash are at the tree, we will run!"

"May, I cannot run, this box is so big."

"Yes, so it is, Fan. Let me have it. I did not see Tom run off with my box. He is no man to let you have the big one to carry to the tree. We will not let him put his nuts in it, Fan," said she.

"No, May, that will not do. You see, Tom is not a man, he is a boy, and he did not see that the box is so big for you and me. This is the tree. Let us put the box on that old log by it."

May and Fan put the box on the log, and sit on one by it. Fan has her hat in her hand to get the nuts Tom may drop into it.

CHAPTER II.

(Words used in chapter I., also the following words found in 1st Part 1st B'k—O, but, hot, gig, lot, sap, fun, bun, too, got, had, sit, am, sip, far, nag, sir, led, bit, ham, if, did.)

Tom and Dash do not see them, so May and Fan get no nuts in the hat.

"Tom! Tom!" said May, "we have got to the tree, but we see no nuts. Are the nuts on it?"

"O, I did not see you," said Tom from the top of the tree. "No nuts, May! see the lot we have, and see the nuts on the tree, up at the top! I have had to put them in this old pan, I had not the box that Fan got for us, with me. I ran off for Dash and did not get it."

"O, we have it Tom, can you not see it on the log?" said May.

"You have it!" said he. "Did you and Fan carry that big box up to this tree? and you are so red and hot! Do not get up for it Fan, Dash and I will go and get you and May a cup of sap and the nuts, so big!" said Tom with his hand up.

Tom and Dash go off. "May," said Fan, "Tom is a man is he not? see the big cup of sap he has for us, and the nuts!"

May and Fan sit on a log and sip the sap.

"You may have the ten big nuts Fan, I have a lot!"

"Let us go at the nuts on the tree," said Tom, "I am off, are you May and Fan?"

"Yes Tom, and we will get the old pan."

Tom has put the nuts from the pan into the big box, and is up the tree.

"Fan and I will put up the pan for you to drop the nuts into, Tom. We will let the nuts get to the top of the pan, and I will put them into the box."

Fan, May and Tom go at the nuts and get a big lot.

CHAPTER III.

(Same words as in Chap. II.)

"Tom," said May, "you had my box, will you get it ?"

"Yes May, this is it."

May put up the lid of the box. It had ham and a big bun in it.

"O ! O !" said Tom with a hop. "I will cut them for you May !"

"O, I can do it." said she.

May cut them and Fan, Tom and she sit on the log, and have a bit of bun and ham.

"Is not this fun!" said Tom. "Fan, may Dash have this bit of ham ? It is not big."

"O yes Tom, he may have it," and Dash has it.

"You have a lot of nuts in that box, Tom, and I have my ten in my hand too. Let us go," said Fan. "But Tom can you get on with the big box and that lot of nuts in it too."

"I will see, Fan," but he cannot do it.

"Do you see that man's hut ? Let us run to it and see if we can get the man to let us have his nag."

May and Fan see an old man by a log, he has an ax, but he is so old he cannot cut with it, and he is sad.

"O Tom," said Fan, "shall I give my ten big nuts to this old man, he is so sad?"

"Yes Fan, put them in his hat."

"You are a pet to do this for an old man," said he. "Are you Fan?"

"Yes, and this is May and this is Tom," said she, "and we have a big box of nuts, so big that we have to go to that man's for a nag to put the box on."

"Do not go to him," said the old man, "my hut is not far off."

Fan, May and Tom go with him to his hut, and see him get his nag and red gig.

"May and Tom," said he, "you may have my nag for the nuts, but Fan let a sad old man have the nuts so she is to have the gig."

"I have one by the hut, it will do for me. Tim, my boy, may go with you and see to my nag, but Fan is to have the gig."

"Go or the sun will set, and you far from the tree and the box of nuts."

"O Fan!" said May and Tom, "see this red gig, and it is for you."

Fan put her hand in the old man's, "O Sir!" said she, "I can not," but he led her to the gig. "Tom," said he, "put her and May in, and off with you."

Tom did so, and got in with them. "Off we go," said Tom, "get up! old nag get up! see the old man at his hut Fan, he is not sad is he? and O Fan! you have a gig and May and I have a big lot of nuts, have we not had fun for one day?"

NUMBER WORK.

The following methods are based on the system laid down by Grube, a celebrated German educator, (1816-1884).

The great object to be attained in primary number teaching is to train the child to observe closely, and in due time to think logically, that he may gain knowledge and power which will enable him by-and-by to grapple with *practical* problems. Many of the failures in life are due to inability to sit down quietly and concentrate the mind upon a problem, weighing it carefully, and arriving at a wise solution.

A child who has studied numbers properly for three years has received a certain amount of information, it is true, but he has gained what will be of immensely more value to him, a habit of observing and thinking, and a power to investigate and to deduce conclusions which will enable him in a very short time to acquire a thorough mastery of practical arithmetic.

The amount of arithmetical knowledge really utilized in every-day life is comparatively small, and could be thoroughly learned by such a pupil in one year of good earnest work by studying one hour per day.

A child who knows the perception of 2, 3, and 5, if given 5 blocks, will discover for himself the fact that in 5 blocks there are 3 blocks and 2 blocks. In arriving at this knowledge he has performed a physical act of separating into two groups, an act requiring but little mental exertion. He has also observed the number of blocks in each group.

While the latter part of the process may or may not have required pure reasoning, all will agree that it is

almost entirely an act of observation, the knowledge being gained through the senses. In proceeding from this and a large number of similar observations to the fact that in the *number* 5 there are 3 and 2, the power of generalization has been called into play. As this power is largely the gift of maturer years, we should avoid asking children to perform operations requiring it.

The first year's number work should be entirely objective, the child performing all operations with his blocks or splints, and discovering everything for himself.

He should be taught that a discoverer is a benefactor to the race, and that there is a demand for brains. During the first year it is best te avoid generalizations; the child will make them soon enough. To him the addition of 3 and 2 should present a mental picture of the union of 3 objects with 2 objects.

It is an important psychological question whether the pupil during the first year should be so taught such generalizations as 3 and 2 make 5 as to give the answer without a moment's hesitation, the action having been performed automatically.

This is recommended to be done in the accompanying lessons; it may be defended on the principle that as the memory is most plastic in early youth, the mind should then be stored with useful facts.

The advocates of the Grube system, I believe, universally agree that it should be done, and it certainly is very convenient in teaching succeeding numbers, but with the lazy pupil it allows the opportunity of shirking the work of investigation, and for memorizing words, the pupil flattering himself that he has really performed the work.

All primary arithmetic should be *mental* arithmetic.

The object aimed at is not so much *speed* as *investigation* and *thought*. The child will make a much better lightning calculator by-and-by for having at the beginning firmly fixed the processes in his mind.

The distinction between primary and advanced number work should be constantly borne in mind.

The problem $\frac{3}{4} \times \frac{5}{7}$ can have no meaning to a young pupil. To him, multiplication is nothing but addition, where the groups are all the same size, and it is absurd to talk of taking a group $\frac{3}{4}$ of a time.

But to the advanced student, who has grown familiar with the convention which allows him to extend his definition of multiplication to that of finding the product of several factors all of which may be fractions, the problem presents no difficulty.

This distinction becomes more marked as we approach and enter the region of pure mathematics.

The first ten numbers are sufficient for the first year. Each number should be thoroughly learned before proceeding to the next. By following the methods laid down in the development lessons, the teacher will find that one year is all too short for this work.

During this time the pupil will be engaged upon fundamental principles, in which there are no processes requiring extended reasoning. When he does face such questions, he should, in *every* case, be led to develop the reason. It is possible, in many subjects, to carry development too far, and waste time by

> "Dipping buckets into empty wells,
> And growing old in drawing nothing up."

But there is little danger of making this mistake in arithmetic.

In advanced forms there should be no hesitation in using *objects* in developing a fact. What student in Spherical Trigonometry has not been aided by making a *solid* triangle in order to have something tangible to help him to the truth? If so, what objection can there be to occasionally resorting to such a device with advanced classes?

In teaching such a principle as "carrying in multiplication," the teacher should have the class discover the reason for the rule from objects, if necessary. It does not follow, however, that she should keep constantly drilling on the proof and expect the pupils to give it at a moment's notice.

The knowledge that we have investigated and proved a fact, makes that fact, even though we have forgotten the proof, more real to us than if we had simply accepted it at second-hand, without investigation.

Starting out, then, with the intention of mastering each step in detail, before proceeding to the next, we ask what must be learned before a number is thoroughly known?

We must know:—

1st. The perception of the number as a whole. (Lesson 9.)

2nd. Any two equal or unequal numbers to be found in the number. (Lesson 10.)

3rd. Any two equal or unequal numbers which make the number. (Lesson 11.)

4th. The equal numbers in the number. (Lesson 12.)

5th. The equal numbers which make the number. (Lesson 13.)

6th. The equal parts of the number. (Lesson 14.)

The first ten numbers, which form the first year's work, include all the simple rules, the fractions $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{4}$, and the signs plus, minus and equals (possibly of multiplication and division), also the figures. (Lessons 15 and 16.)

These last would be better untaught for at least five months, but as they are almost indispensable in assigning busy work, it may be as well to teach them from the first, always endeavoring to keep the number, and not the figure, before the mind.

The teacher should begin the first day with the number one. If the children know "one" thoroughly, she should proceed to the number "two," and so on, until she reaches the point where the known and unknown are mingled; this point will generally be found in the number "three." This review will be of service in grading the class into sections.

The teacher who can teach one number thoroughly can teach any other number. On this account the number 6 has been taken as an illustration and from it the teacher is expected to formulate her plan for other numbers. Each number should be thoroughly taught before proceeding to the next higher, *e.g.*, at least a full month should be devoted to the number six before proceeding to the number seven.

No *definite* limit can be set down as the amount which a child should go over in a certain time. The tests of advancement are power to do work, and knowledge of preceding work. To an average child who has never studied number at all, ten makes a full year's work, but Kindergarten children and others may be able to do more. The words add, subtract, multiply and divide need not

be used in the number work of the first year. The *meanings* of signs =, + and − should be taught during the first half-year, and of ÷ and × during the second half-year, or later. The object in teaching the signs at first is to enable the teacher to assign busy work easily from the blackboard. It is well to teach the meaning of "equals" first, writing such an example as 2 and 1 = 3, and teaching the child to read it, "two and one are three," or better still, allowing him to supply his own word. Perhaps he will prefer "make" to "are." The *word* "equals" should not be taught during the first month. The third week he may learn "plus." (Lesson VIII.)

It may be just as well, however, to reserve the name plus until later.

By a little careful supervision the child will make a correct inference in regard to the use of the sign, without having his mind burdened with the difficult phraseology. In teaching the sign ×, the teacher must decide at the beginning as to whether she will consider 3 × 4 to mean three multiplied by four, or three times four. The latter is preferable, the child being taught during the first half-year to read the expression "three fours;" in the second half-year, "three times four," and afterward, "four multiplied by three."

No lessons have been given on *drill*, as the teacher will be able to develop her own plan. The numeral frame may be of some service in drill work. At the beginning it is a dangerous device, for the child may watch the teacher perform the operations, and think that he has discovered when he has done nothing but memorize.

A lesson on the writing of a number of two digits is added. (Lesson 17.) This work properly belongs to the second year, but it is inserted here because notation is of such great importance in after study.

If a child has thoroughly learned the notation of a number of three digits, the reason for carrying in addition, and the table of long measure, the operations performed in the solution of the following problems will be almost exactly similar to him :—

h.	t.	u.
1	2	8
1	1	4
1	1	3
3	5	5

yds.	ft.	in.
1	2	8
1	1	4
1	1	3
4	2	3

In this way, after properly learning the simple rules, together with the tables of weights and measures, he can deduce all the compound rules without the slightest aid from the teacher.

LESSON 9.—THE PERCEPTION OF A NUMBER.

Purpose.—To teach the perception of the number 6.

(Children stand around a table having spools, slats, sticks, blocks, etc., on it.)

Plan.—Give short, rapid drill on the perception of 3, 4, and 5.

Hold up six things before the class and have them find the same number. "How many things have I?"

If no one knows the name *six,* tell it.

Have children take six things, and develop such stories as "I have six pens;" "John has six blocks," etc. Have pupils bring you 6 things from a distance.

Have knowledge of six gained through different senses, *e.g.*, let a pupil take six steps, close his eyes and touch six desks, tell you how often you ring a bell under a desk, etc.

Test his memory of six. Develop such stories as, "I saw six trees in the park this morning."

Ask him to draw six pictures on the board.

Busy Work.

Draw pictures of six things on slates.

Draw a picture containing 6 things, *e. g.*, a picture of a tree having 6 apples on it.

Write the word "six."

Arrange pegs, slats, cardboards, etc., in groups of 6 each.

Write 6 words on slates.

Write six stories on slates.

Make 6 vertical, horizontal, or oblique lines on slates.

Make 6 pictures with slats or pegs.

Arrange 6 colors on desks.

Copy figure 6 on slates.

Picture numbers may be made on slates. These consist in stars arranged symmetrically in many combinations thus:

```
*   *   *                    *   *
*   *   *        or        *   *
                             *   *
```

Suggestions.

If convenient, test through the different *senses*. (The author once met a pupil who could fetch five things from another room, but who invariably said, when a bell was rung five times, that it rang six times.)

The Teacher must be prepared to furnish a large number of problems, and should procure an arithmetic containing a large collection carefully graded. Such a work, however, should not entirely take the place of original problems by the teacher. Children find difficulty in proposing problems at first, but after a few lessons do so very readily.

A string of beads may be hung on each desk, the number of beads on the string corresponding to the number which the child is studying.

LESSON 10.—SUBTRACTION.

Any two equal or unequal numbers in a number.

Purpose.—To teach that 6 - 2=4.

Plan.—Drill on the perception of 6.

Ask pupils to take six things, and lay two of them on the table. "How many have you in your hand now?"

Give such problems as the following—"If you have 6 blocks of wood and 2 of them are burned up, how many blocks will you have left?"

"Show me with your blocks."

"Johnnie has 6 ducks and two of them are on the pond. How many are not?"

Endeavor to get children to propose problems similar to the foregoing.

"Who will tell me a story about 6 slate pencils and 2 slate pencils?"

Impress the fact of the lesson by developing and memorizing the following—"In 6 there are 2 and 4."

Have children draw 6 pictures on the board and separate them, so as to show that 6 - 2=4.

Busy Work.

Take 6 splints, pegs, blocks, etc., and divide them into groups of 4 and 2.

Pupils may draw a picture to represent a story which the teacher has written on the board, *e. g.* :

"Tom had 6 rats in a box. Dash got two of them. How many ran off?"

Draw original pictures of $6-2=4$.

$6-2=$ may be written alongside a number of problems previously known and children required to work them with their splints and pegs on the desks, also to copy them on slates and fill in answers, *e.g.*:

$$\begin{aligned} 6-2&= \\ 3+1&= \\ 2+\ \ &=5 \\ 6-2&= \\ \ \ +4&=5 \end{aligned}$$

Suggestions.

The teacher will notice that she requires only *six* splints to teach the accompanying lesson. By this method the child will see that the subtrahend is always a part of the minuend.

The word "left" may perhaps require some explanation, *e. g.*, the child would naturally answer 2 to the following problem: "If there are 6 ducks on a pond, and I shoot 2 of them, how many will be left?"

It will be necessary to explain to a class how to draw pictures representing problems such as $6-2=4$; *e. g.*, the teacher may draw a picture of a tree with 4 apples on it, and two on the ground below. The child will find it hard to do this at first, but he soon becomes completely absorbed in the exercise.

In a review with the whole class, one pupil may propose a question for all the rest.

In the class, one pupil may arrange his articles to illustrate a story, and another tell the story thus: "John had 6 leaves. He divided them into two piles, with 4 in one, and 2 in the other."

Avoid such words as subtract, etc. Avoid the error of thinking that a child thoroughly knows a problem when he can write the answer.

Do not attempt too much at one lesson. If the child never again makes a mistake in the fact that 6—2=4, ten minutes have been well spent.

The other subtractions in 6 similar to the above are—

In	6	there	are	1	and	5
"	6	"	"	3	"	3
"	6	"	"	4	"	2
"	6	"	"	5	"	1

LESSON 11.—ADDITION.—ANY TWO EQUAL OR UNEQUAL NUMBERS THAT MAKE A NUMBER.

Purpose.—To teach that 5+1=6.

Plan.—Drill on the perception of 6, 5 and 1. Have children take 5 things in one hand and one in the other. "Now put them all in one hand." "Tell me what you did." "How many have you altogether?" Propose such problems as the following:—"If a boy has 5 marbles and some one gives him one more, how many marbles will he have then?" "Show me with your sticks."

Endeavor to get the pupils to propose problems similar to the above. If necessary, aid by suggestion, thus: "Ask me a question about 5 apples and 1 apple."

Develop the sentence—"five and one make 6," and drill on it.

Have the children all go to the board and draw original pictures of 5 things and one more.

Suggestions.

It is a vexed question which should be taught first, $6-1=5$ or $5+1=6$. It may be well to take the two processes at once. As a general rule children like to break dishes before they want to build houses, but not always. It is better to follow the lead of the child in this respect. Some children instinctively divide their blocks into groups, and continue the process of analysis. Others at once take some more blocks and continue to synthetize. With others the processes are naturally intertwined, and they cannot learn $6-1=5$ without at the same time learning $5+1=6$.

It might appear that in the additions of 6 we should include problems containing three addends, *e. g.*, $2+3+1=6$; but in learning 5 the children have learned $2+3=5$, and it is unnecessary to teach this fact a second time.

In such lessons it is necessary to give a great number and variety of problems. The child should be led to call up his previous experiences for he has often in the past observed the union of 5 things and one thing, and after this lesson each observed case will strengthen his generalized fact.

The other additions in 6, similar to the foregoing are :

1	and	5	make	6
2	"	4	"	6
3	"	3	"	6
4	"	2	"	6

LESSON 12.—DIVISION.—THE EQUAL NUMBERS IN A NUMBER.

Purpose.—To teach that in 6 there are three 2's.

Plan.—Drill on the perception of 2, 3, and 6.

Ask pupils to take 6 things and do as you do, dividing six blocks into three groups of two each.

"How many groups?" "How many in each group?"

Have children take 6 articles and find for themselves how many twos are in six.

Develop the story—"In six there are three twos."

"A boy bought six skates, how many pairs of skates did he buy?' Give a number of such questions. Have the pupils propose questions similar to the preceding.

Draw a picture on the board illustrating such a story as "there were 6 chickens, and they walked off two together, so there were three groups of chickens."

Have children draw pictures on the board to show that in 6 there are three twos.

The other divisions of 6 similar to the foregoing are:

in 6 there are 6 ones.
" 6 " " 2 threes.

LESSON 13.—MULTIPLICATION.—THE EQUAL NUMBERS THAT MAKE A NUMBER.

Purpose.—To teach that three 2's make 6.

Plan.—Drill on previous numbers, also on the fact learned in a previous lesson that "in 6 there are 3 twos."

Have children take 2 splints together, 2 more together, and 2 more together. "How many splints in each

group ?" "How many groups ?" "How many altogether ?" Develop from the class the story—"three twos make six."

Have children show this with sticks, splints, etc.

Give such problems as, "If there are two boys at each desk, how many will there be at three desks ?"

"Three boys are looking at me, how many eyes are looking at me ?"

Have class ask such questions as the above.

"Show me on the board that three 2's make 6."

The other multiplications in 6 similar to the foregoing lesson are:

6 ones make six.
2 threes make six.

LESSON 14.—THE EQUAL PARTS OF A NUMBER.

Purpose.—To teach that $\frac{1}{2}$ of $6=3$.

(The teacher must provide herself with an apple or a stick or a circular piece of paper cut in halves, besides splints, blocks, etc.)

Plan.—Hold up the apple before the class. "What is this ?" Break it into halves. Hold up a half apple. "What part of the apple is this ?" "How many of such pieces are there in a whole apple ?" "Why do you call this half an apple ?" Develop such an answer as—"I call it half an apple because you divided the apple into two parts, exactly the same size."

"Take 6 splints." "How will you find out what $\frac{1}{2}$ of 6 is?" "Divide six sticks into two piles exactly the same size, and find the number of sticks in one pile." "Do this and tell me how many you find."

"The half of 6 sticks is how many sticks ?"

"Find how many pens in $\frac{1}{2}$ of 6 pens."

"Show me $\frac{1}{2}$ of 6 blocks." "How many blocks?"

"If I have 6 apples, and give you $\frac{1}{2}$ of my apples, how many shall I give you?"

Lead pupils to propose such questions as the preceding.

Develop the sentence, "one half of six is three."

Write $\frac{1}{2}$ of $6=3$ on the board and drill.

Have the pupils draw pictures on the board to illustrate the fact taught.

Suggestions.

It is likely that in teaching 4, the term one-half will have been fully taught. If so drill on $\frac{1}{2}$ of 4, and proceed at once with the discovery of the proposed fact from the splints.

If the pupils are not familiar with the word "half" it will be necessary to spend a full lesson on it, previous to such a lesson as the accompanying one. In that case it is well to begin with a straight line or string, proceed to strips of paper and plain figures on the board, then to regular solids, afterwards to numbers.

A little child will often find the number in half a pile of sticks by making two piles, beginning by placing one stick in one pile and one in the other until his sticks are exhausted. In this way he can tell how many sticks there are in $\frac{1}{2}$ of a pile containing 20 sticks, when he cannot count above ten.

In teaching fractions, paper circles are good for illustration. Let the child measure the circumference with a string, and then measure half his string.

The other partition in 6 similar to the foregoing lesson is $\frac{1}{3}$ of 6 is 2.

LESSON 15.—PLUS AND MINUS.

Purpose.—To teach the sign +.

Plan.—Write on the board such a problem as 1 2=3. Ask children to read it for you, and tell what is left out.

Instead of writing "and" in our stories we can put in a mark like this +, *which always means 'and.'*

"Who can tell me what this mark (+) means?" "Tell me what it is like."

"Make it for me with two splints."

"Put the mark which means "and" in its place in this story 5 1=6."

"It looks like a little boy with his arms stretched out." "How many blocks has he in one hand?" "How many in the other?" "What is he going to do with his blocks?" "When he puts them together how many blocks will there be together?" "These two horizontal lines mean that he has put his arms together," etc.

"We call this boy "*plus.*"

"What is his name?" Make "plus" for me on the board." "Make him with your splints, and say the name as you make him."

"Put 'plus' in this story, 2 2=4, and read it."

"Finish this story, 3 3=6, and read it."

Drill carefully.

Busy Work.

Have children copy on slates, a number of problems which lack the signs, fill in the proper signs and work with pegs, putting the answers opposite the problems.

Let them copy problems, filling in the signs, but not working them with the pegs.

Let them copy problems containing the signs + and —.

Let them make the signs with their splints and pegs.

Do not be satisfied when the child can read a problem, putting in the signs. Be sure that he sees the *force* of the signs, by requiring him to work problems, which he makes himself, with his pegs, repeating to you each operation as he performs it.

The Primary Teacher will find that devices similar to the one used in the accompanying lesson are exceedingly helpful, even though they may appear *childish*, and in many subjects, notably phonics, she will find them a happy variation to the hum-drum routine of every-day work.

LESSON 16.—FIGURES.

Purpose.—To fix the first nine digits in the mind and drill on previous number work.

Plan.—Write a figure on the board. Ask the children to show you that many fingers.

"Tell me something which has this many feet," writing the figure 4 on the board.

"Tell me a story about this," writing the figure 2 on the board.

"I am thinking of an animal and want you to guess its name. It has this many feet, this many ears, eyes," etc.

Continue your explanation until the children guess a "*fox.*"

Tell a story about a fox and some chickens. Have the children take "this many" sticks to make a hen-house, "this many" pegs for hens to put in it, take away "this many" that the fox caught, etc.

Continue the story in this way, until all the figures have been drilled on.

LESSON 17.—NOTATION.

Purpose.—To teach to write a number of two digits.

Preparation.—The class should know the first ten numbers, and the perception of 11, 12 and 13. Have a small board which can be hung up and in which there are two hooks in a horizontal line two inches apart, also a number of small splints and rubber bands.

Plan.—Have pupils take ten splints each and put an elastic band around them. Let them repeat this process until they can bunch into tens quickly.

Have them put all their bunches back, and try to take ten in the quickest way they can. They will discover that the quicker way is to take a bunch.

Develop that we call these bunches, *tens.*

"Take two tens in your left hand."

"Take three ones in your right hand."

"Tell me what you have." "We always hold tens in our left hand, and ones in our right." "Put them all back." "Take one ten and four ones." "Tell me what you have." "Where do you hold tens?" Drill.

"Look at the board." "Which hook is opposite your right hand?" "We will call that the right hand hook." "Let me see which hook you think these two tens should hang on."

"I have one ten and two ones." "You may hang them on the proper hooks," etc.

"You know how to write numbers up to ten. We have a quick way of writing numbers greater than ten, by using just the same figures as before."

Make two marks on the blackboard similar to the relative position of hooks.

"Which is the right hand dot?"

"Under which dot do you think you will write your tens?" "How many tens are there on the small board?" "What shall I write under the left hand dot?"

"You may write it for me." "You may write the ones."

Drill by repeating this a number of times until the children can transfer readily to the blackboard from the small board, writing figures for bunches.

"Now we always write tens in this way." "If we have more than ten, we find out how many tens and how many ones we have, and write a figure on the right hand side for the ones, and on the left hand side for the tens."

"Write one ten and two ones for me."

(The preceding lesson is only suggestive and might better be taken in several lessons, as the subject is worthy of time.)

LANGUAGE LESSONS.

After enlarging on the importance and capabilities of the English Language, Mathews says: "Let us carefully guard its purity, maintain its ancient idioms, and develop its limitless resources, that it may be made, if possible, even more worthy than it now is to be the mother tongue of not only the two great sister nations whose precious legacy it is, but of the whole family of man."

This appeal comes with special force to the Primary Teacher, charged with the oversight of the child during the first stages of his development. Most of us remember the difficulties experienced in early childhood in grasping thought, and trying to talk like grown-up people. How hard it was to understand some things, and how easily we understood others that everybody else thought were completely beyond our ken! When we framed our first baby sentences, was there any one there to help us? If so, we can never forget their kindness. Was there any one to mimic our feeble stammerings and make fun of our failings? If so, their cruelty may be forgotten, but its evil results will ever remain with us. Many of us too, have reason to regret early companionships, which have left us a legacy of incorrect expressions, slang phrases. and faulty pronunciation,

A whole school has been known to assume the pronounced brogue natural to a teacher who had taught the school for several years. Incorrect expressions dropping from the lips of a teacher will be repeated by the pupils. In scarcely any other particular is the old proverb so fully verified, that "as the teacher, so is the school."

Language teaching is one of the most laborious and important duties of the primary teacher, demanding constant watchfulness, and most thorough and careful preparation.

The main object of language lessons is to teach children to use language. The *art* of using language is learned by imitation and practice. In primary grades the child should be taught to speak good English, rather by exercises in conversation than by studying the underlying principles of the language. Very much of the difficulty under which English has labored in the past has been due to the mistaken idea that, in studying text-book Grammar, young pupils were learning to speak correctly.

Again, language should be *thought* expression. If not, it is merely the *saying of words.* The pupil should speak because he has something to say, rather than because he is asked to say something. We should also see that the child has emphasized the thought before we ask him to emphasize the words.

Two thoughts should therefore be constantly kept in mind by the teacher :

1st. A child who has never heard any false syntax will not be apt to speak incorrectly. If, from earliest infancy, he be placed amid such environments as always to hear the best and purest English, he will by unconscious imitation speak good English himself.

2nd. Words are useless and meaningless to us unless they represent ideas, the sequence being—ideas first, then words.

Every lesson should be a language lesson. If the child says "I seen six boys," the teacher may say "You saw six boys," and during the lesson, so direct the questions

and answers that the correct form will be used several times. It is often better to insist on the correct form at once, except with very young children, for there is no quicker or surer way to remedy a defect in English than to repeat the correct expression over and over again. It is better not to criticize an error in a Primary Language lesson, but simply to correct it.

While language should be thus taught incidentally in every lesson, it should receive special prominence in the following, all of which fill the requirements of the two fundamental facts stated above:

1. Language Lessons, proper; 2. Object Lessons; 3. Lessons on Size; 4. Lessons on Form (Drawing); 5. Lessons on Color; 6. Story Lessons; 7. Geography Lessons.

1.—Language Lessons Proper.

There should be lessons for the express purpose of word development and word drill. The conversation lessons spoken of in the chapter on primary reading come under this head, and in fact the greater part of the work in reading during the year.

Have the children describe pictures. Select two dozen good pictures and paste them on common cardboard. The pictures should be interesting and well executed.

As a preparatory lesson hold up a picture before the class, withdraw it quickly, and allow the children to tell you all they saw. By not allowing them very much time to look at it they will learn that they must concentrate the mind on the work. Keep at this until they have discovered nearly everything in the picture and have described it fully to you, but do not weary them. For the next lesson give each child a picture, and, after allowing five minutes to study it, let him tell the story of his picture. Let the

test of a good story be the power to tell it, so that the others who have not seen the picture can draw a similar picture from the description given. It is amusing to have them try to do this sometimes and see the results. They may also exercise their imaginative and inventive faculties in giving their interpretation of the picture, *e. g.*, what the persons portrayed in the picture are doing, and why, etc. It is possible to create such an enthusiasm in this exercise that on the following day you can distribute pictures to the children for busy work and have them work away quietly for ten minutes preparing a good description of their picture. At the end of the ten minutes bring them up for a conversation lesson and you will have no lack of English. Insist on full sentences and correct expression.

You may also develop words with the intention of forming a basis for future grammar study, *e.g.*, such words as "short," "shorter," "shortest," may be developed from objects and the lesson be made thoroughly interesting.

The following is a good device for *drill* on words:

The teacher selects some word as "hen." She does not tell the class this word but tells them another resembling it, *e. g.*, "pen." "I want you all to think of a word which sounds like 'pen.'" "Do not *tell* me the *word* you think of, but ask me about it by a question." "Suppose you think of 'men,' you may ask me Is it what boys are when they grow up ?' If that is the word that I had at first I shall say 'yes' and the game is yours, but if it is not my word I shall say 'no' it is not 'men,' and then you must guess again."

Proceed in this way until the word "hen" is guessed, or until five minutes have elapsed, then tell the word.

2.—Object Lessons.

Most of the teaching in a primary grade should be *objective, e.g.,* the child should be led up to the fact that 2 and 4 make 6 by means of a number of objective illustrations, such as 2 leaves and 4 leaves make 6 leaves.

In an *object* lesson on the leaf we study the leaf itself as to parts, size, color, etc. Object teaching, which consists simply in giving a lot of hard names and useless details in connection with an object, is of very little value. On the other hand such lessons can be made most beneficial when properly conducted.

The child should have the object in his own hands and find out for himself everything which he can discover. He should then be led by proper questioning to find out what has escaped his observation, after which he should receive additional information in regard to the object from the teacher.

One of the greatest aims is to furnish the child with a plan of investigation for himself, *e.g.,* so that by studying one rodent thoroughly he may be able to study all others without a teacher. For this reason there should be a carefully chosen and logical sequence. Three weeks is none too long to devote to the study of one subject, *e.g.,* the squirrel. The study of natural science is so entertaining and useful that it may be wise to confine the lessons almost exclusively to such study of objects as will lead up to zoology, botany and mineralogy. The subjects chosen should be native to the locality, and will be made more interesting if furnished by the children. By selecting subjects appropriate to the time of year, etc., much labor may be saved, *e. g.,* lessons on flowers should be taken during warm weather, the children being encouraged to do some gardening on their own account.

In all these lessons it is well to begin with the *whole* animal, plant or mineral, and proceed to the *parts*, avoiding technical terms, and making generalizations from *observed facts* only.

In the first year these lessons must be of the most simple character, nothing difficult should be attempted. The study of the *animal* kingdom is the most interesting to children. It is better not to attempt more than a dozen subjects in the year.

The primary teacher should be a taxidermist, able to prepare and mount her own specimens. This is not by any means as difficult a task as will at first appear, for a teacher can, in a few weeks, acquire sufficient proficiency in the art to fill all the requirements of a primary grade.

In studying such a subject as the squirrel it is better to have a good many specimens for examination. The number of lessons which the teacher will devote to the subject will depend on her power to keep up the interest. She should give at least ten consecutive lessons. In the first and last lessons it would be best to have a real live squirrel in a cage, but the teacher will require to exercise a good deal of discretion here. If her discipline is weak, her class a mixed one of large and small pupils, or one with which she is not well acquainted, the experiment might prove most disastrous. It is possible to introduce a number of things into a certain kind of school room which will lead children to run riot, forgetting the true ends of education.

On the other hand, if she knows her room to be a home, as it ought to be, if every child is her friend, if all are fired with a common impulse to become wiser and better, if her work is one constant, glad, united search

after truth, such a digression as the bringing in of a live squirrel will not create any uncalled-for merriment or excitement.

In such a class ten or fifteen minutes devoted to the first lesson will be spent in observing the little stranger and conversing about him, and at the termination of the lesson the children will feel a strong desire to know more about their visitor.

In the second and succeeding lessons they should have stuffed specimens, and examine them, telling her their discoveries. She may have them first discuss the general characteristics of the squirrel as in the preceding lesson, the color, etc.

The children may then name and point to the parts. These may be discussed separately, in the following order :—Head, body, legs, feet, tail. These parts may be analyzed in succeeding lessons, *e. g.*, one lesson may be devoted to the parts of the head. The uses of the parts may also be taken up. (Lesson 18.) The habits may be studied at the same time, or form the basis of several lessons.

The teacher should allow the children to lead her to a certain extent, but she should still supervise the investigation, stimulating them to observe, discover and tell.

An object lesson should not be a simple repetition of the child's previous knowledge. The teacher should strive to have one investigation lead up to another ; thus, when studying the legs of the squirrel she can easily lead the children to a consideration of its actions. The lessons may be varied by introducing stories about squirrels, each pupil contributing his quota to the general fund.

Every object lesson should be succeeded by a drawing or painting lesson for busy work. The pupil should be given several preparatory lessons in mixing paints, etc. Forms should also be moulded in clay. After a lesson on the head of the squirrel, half-an-hour may be spent to good advantage in moulding a clay form of the head. (*See* pages 101, 102.)

At the conclusion of the series the live squirrel may again be brought before the class. He is now a well known friend. Before leaving the subject, the knowledge gained may be classified in a general way, and supplemented with such other information as may be helpful to the child. This additional knowledge may be given incidentally during the lessons. The teacher should have studied the subject thoroughly, so as to feel perfectly at home with it, and know that she is competent to answer questions which will arise from time to time, but she must studiously resist the temptation to *tell* anything which the child can find out for himself.

Plants may be studied in a similar manner.

It is almost impossible to arrange any series of lessons which will be of real value to the teacher on these subjects, so varied are the requirements of individual teachers.

LESSON 18.—OBJECT LESSON ON THE SQUIRREL.

Purpose.—To teach the peculiarity of growth of the squirrel's teeth.

Plan.—Show the class a number of squirrels' teeth; also some nuts, and talk about them.

Develop from the class that a squirrel lives on nuts, and first gnaws holes in them before he can eat them.

Have a child take a tooth and try to make a hole in the nut by rubbing it, the other children observing closely, but before beginning, have the child examine the tooth carefully.

After this is done, develop from the class that the tooth is worn, and that if a squirrel made a great many holes in nuts, his teeth would be apt to wear out.

"Do our finger nails wear out?"

"Why not?"

"Who can tell me what would keep a squirrel's teeth from wearing out?"

"Yes, a squirrel's teeth grow, like our finger nails."

"What would happen the squirrel if his teeth did not grow?"

"How kind God is to the little squirrel."

"If I were to put a squirrel in a cage and feed him on porridge, what would happen to his teeth?"

"A man once did this, and the poor squirrel's teeth grew as long as your fingers!"

"Do your teeth grow that way?"

3.—Lessons on Size.

In all object lessons the child should be trained in the study of size, form and color, but lessons should be given in which each of these receive special consideration.

During the first year a number of lessons should be given to make the child familiar with such spoken words as large, small, long, short, thick, thin, wide, narrow, etc., and at the same time to teach him to observe objects carefully as to size.

4.—Form.—Drawing.

The child loves to draw, and should be allowed to develop himself in this direction to the full.

Colored crayons are a necessity in a primary grade.

The child prefers drawing from real objects, but it is well, in addition to this, to begin at fundamental principles, and, by a carefully developed sequence, to lead him to the art itself.

By object lessons teach the following in the order indicated:—Sphere, cube, cylinder, surface, hemisphere, curved surface, plane surface, face, edge, curved edge, straight edge, corner point.

Then reversing the process, teach the child to *draw* in the following order:—Point, line, straight line, curved line, angle, square, circle.

The Second Kindergarten Gift, consisting of sphere, cube and cylinder, can be purchased for about 60 cents.

LESSON 19.—DRAWING LESSON.

Purpose.—To teach the circle and centre.

(Be provided with sphere, cube, cylinder, hemisphere and a number of circular cardboards, having the position of the centre marked on each.)

Plan.—"Find me a cube." "What kind of surface has it?" "How do you know it is a plane surface?" Develop the answer—"I know it is a plane surface because I can slide the cube and move my fingers along it."

"Show me a curved surface that ends." "What does the curved surface on the hemisphere end in?" Develop the answer—"It ends in a curved edge." "Show me

another surface that ends in a curved edge." Have children point out plane surface of hemisphere, top of cylinder, and the cardboards. Give each child a cardboard. Call attention to the mark in the middle of it, and develop that this is called the centre.

"You may all take lead pencils and draw a straight line from the centre to the edge." "Draw two more lines from the centre to the edge." "Measure the lines." Develop that all lines drawn from the centre to the edge are equal to one another.

"What kind of edge has this cardboard?" "If you draw a picture of a curved edge, what do you call it?" "I want you to draw a picture of your cardboard." "How shall we begin?" "Make a dot for the centre." "How far will your curved line be from this dot?" "Measure and find out." "You may put some more dots for your curved line to pass through." "Draw your curved line."

"Who can tell me the name of this picture of the cardboard?"

If the children do not know the name, tell them that it is called a *circle.*

"What do you call this middle point?"

"What kind of line is this around the outside?"

"What do you know about the distance of this curved line from the centre?"

Develop some such definition as the following:—A circle is a figure having a curved line around it, and every point in the curved line is the same distance from the centre.

Busy Work.

Let the children draw on their slates pictures of circular objects, such as the face of a clock, target, plate, pipe hole, etc.

Let them arrange their pegs as nearly in a circle as possible.

Let them draw circles with squares as groundwork.

If they have paints, let them paint circles of primary colors.

Suggestions.

This lesson should be followed by a lesson on diameter.

Do not let the children play with the cardboard. Have them *think*.

Do not continue too long at one thing, but proceed rapidly from point to point, making the lesson as bright and lively as possible.

Do not attempt to teach too much in one lesson. One-third of the accompanying lesson is a review.

Drill a few moments on new facts when discovered.

In busy work be satisfied with small beginnings, but insist on the pupil's best work.

5.—Color.

The importance of a knowledge of color in every-day life renders it necessary that a child should be trained to this department from the very first. During the first year he may confine his attention to the primary and secondary colors.

Teach one color at a time, and illustrate by numerous examples. The study possesses such an attraction for little people that it may be introduced for recreation.

The only difficult part in any sequence that a teacher may adopt is the formation of secondary from primary colors. (Lesson 20.)

The First Kindergarten Gift, containing six woollen balls, representing the primary and secondary colors, costs about $1.00.

LESSON 20.—COLOR LESSON.

Purpose.—To teach secondary colors from primary, using colored crayon and 1st Kindergarten Gift.

Plan.—Drill on the primary or standard colors, red, yellow and blue, previously learned.

Hold up the red ball. Ask pupils to take a piece of crayon of the same color as the ball. Have pupils make, near the upper left hand corner of their paper, a broad, vertical mark, about an inch long, with the red crayon.

Similarly, taking yellow crayon, have them make a broad, horizontal mark, an inch long, from left to right, beginning at the top of the red line.

At the place where the lines meet, mix the two colors, applying a little of each. "Tell me a fruit that is the same color as the new color."

"We call this new color *orange.*"

"What two colors did you mix to get orange?" Develop and drill on the sentence. "We get orange by mixing red and yellow."

Ask questions for drill such as, "If I look through a yellow glass at a red house, what color will the house seem to be?"

Continue in a similar manner with other colors.

Suggestions.

The teacher should supervise the mixing of the colors.

Such lessons may be given in a full room by having one pupil come forward and draw the colored lines on the board.

It will be necessary for pupils to wash their hands after such a lesson, if they all use the crayons, which is much the better plan. Children always remember a game in which they are the players.

6.—Story Telling.

The child comes to us when fancy is at its highest point. He creates his own little world, and lives in the future. No one can estimate the teacher's power to make this fanciful world a *pure* one, and in no better way can this be accomplished than by beautiful stories. Whether these be Bible stories or fairy tales, they should be carefully chosen to suit the requirements of the pupil.

There comes a time when the child no longer believes in Santa Claus, but it does not follow that he is then ready for the study of the Calculus or the Categories.

Again, the selections should be made from the best authors. In this way the child learns language by the correct method. He becomes saturated with good English, and speaks it spontaneously.

All children love to hear stories, and the teacher who knows how to tell a story *well* will foster a love for history in the young mind, which in later years will make the subject as interesting as a fairy tale. By careful selections she will be able to impart considerable information, which can be classified in later years when the child enters upon the study of history proper. Indeed he should then find himself quite at home with such characters as Alfred, Watt and Howard. He may study a little local history in these language lessons. Most people like to talk about themselves and their relatives. The teacher, of course, must be cautious in dealing with the history of the pioneers of the vicinity, its progress, etc., but the good

tactician will experience no difficulty here. In these stories an endeavor should be made to impress upon the young mind the advantages of civil and religious liberty enjoyed by us, and to lead his mind back to the time when our forefathers suffered in order that we might inherit these blessings, thus preparing him for a philosophical study of history.

Here, too, the teacher has ample opportunity to exercise her highest power, that of "heart culture." The object of all education should be "to gain power to help others." A child should read in a class not so much because he is told to do so, as because he wishes to impart information to the rest of the class, and at the same time grow stronger for the imparting of information to others. The stories should be chosen with this end in view. It is not necessary to tack a *moral* to the end of a story in order to give a boy a higher conception of what is pure and noble. Many a boy has been saved by a sudden impulse coming to him from some story of self-sacrifice.

It is well to tell the story and have children reproduce it for you in their own words. The exercise may be varied with good effect by having the children tell the stories.

Children should be taught to memorize selections of beautiful English. Youth is the most retentive period, and the gems of literature memorized will serve as a fund for after life. This consideration is one which is apt to be overlooked, especially by ardent admirers of objective methods.

Friday afternoons should be devoted to recitations, dialogues, singing, etc., and the pupils should be assisted in

making their selections. This is the time for the teacher to cultivate a love for a kind of literary entertainment, which, in some places, is unfortunately compelled to give place to that which presents the veriest trash.

The small child naturally has as high an appreciation for choice literature suited to his age as he has for maudlin sentimentality and debased language, which deprave the taste and weaken the mind. In the hands of a good teacher he will enter heartily into the discussion of such gems as this by J. A. Garfield:—"Ideas are the warriors of the world."

7.—Geography.

It may be as well to omit the following work until the second year, and to devote more time to the subjects of size and form. However, if the teacher can find time to devote to it, during the first year, the child may learn considerable Geography, incidentally by language lessons.

To many young children the processes of analysis and synthesis may be equally easy, but the majority naturally proceed by analysis either of qualities or extent. The child beginning Geography does not desire to begin with the study of the universe as a whole, and proceed to its parts. He may not even wish to begin with the study of the *whole* space known by him. He likes to commence with the locality that he knows the most about. His concept of his own school room probably contains more to him than his concept of any other locality of the same area.

He may begin with his own desk, if preferable, moulding a pattern of it in sand and drawing a picture of it on paper. Proceeding similarly with the room, he may hang up his picture of it, by the north side, etc.

Having continued this "circular" Geography as far as is deemed profitable, perhaps to the boundary of his own county, he may start upon the real study of Geography by a preparation for the study of the continent.

This implies a study of structure. The child should be taught to draw his own conclusions in reference to the effects of mountains, rivers, etc. The principal object in geographical study is to gain a perfect concept of the locality studied, one which will adapt itself to the onward march of time, anticipating erosion and upheaval, the building of cities, and the growth of nations, thus forming a dissolving view, ever changing and ever perfect.

With this ultimate object in view the teacher will find it possible to do much preparatory work during the first year.

The work of the year may embrace the following :—

1. Position of (*a*) objects on the desk, (*b*) objects in the room, (*c*) objects in the yard, (*d*) principal buildings in the city, (*e*) scenes of interest in the city, etc.

2. Direction including cardinal points of the compass, also direction of different objects in the room, yard, city, etc.

3. Distance, including (*a*) table of long measure, (*b*) distance of objects in room, play-ground, city, etc., (*c*) size of desk, room, yard, city, etc.

In addition to the above the child may be led to study natural phenomena incidentally. From the results arrived at in observing streams and puddles after a rain storm, by-and-by he will draw most important conclusions in regard to rivers and lakes.

In taking up the above work the object should be simply to lead to the study of Geography by language lessons, training the child to observe, memorize, imagine and tell.

During the first year it is best not to study the world as a whole, although the child will incidentally learn a great deal about the universe from a hundred different sources.

Cabinet.

The following suggestions may be helpful in arranging a cabinet of curiosities and materials for busy work in a primary grade.

The objects should be collected mainly from the immediate vicinity, and the children should be encouraged to help in furnishing them.

They should possess additional interest to the children from having been studied in object and language lessons.

Where the pupils are made to feel that the cabinet is really theirs, the visitor will be astonished to find with what interest and pride they show their collection and dilate on the peculiarities of the objects.

The children should classify from the first, and should learn to recognize the objects, know their names, and a few facts concerning them.

The cabinet may consist of five shelves arranged as follows :—

Top Shelf.—Animal kingdom : Insects mounted. Birds and mammals stuffed. Other specimens preserved in alcohol, *e. g.*, the frog in different stages. Animal products. Glue, wool, silk, coral, shells, etc.

Second Shelf.—Vegetable kingdom : Vegetable products of the vicinity, grain, flowers, fruit, nuts, etc. Manufactured vegetable products : Linen, cotton, wicker work, wooden objects, etc.

Third Shelf.—Mineral Kingdom : Stones and pebbles of the vicinity, iron, gold ore, flints, arrowheads, etc.

Fourth Shelf.—Objects illustrative of form, measurements and color, manufactured by children when possible: First and second kindergarten gifts, clay forms, etc.

Fifth Shelf.—Objects used in number work and reading, splints, script, etc.

BUSY WORK.

This term, which I have chosen from the Kindergarten, is applied to any material with which the pupil can profitably amuse himself during school hours.

The objects of its use are to enhance the charm of school life and to aid the child in the acquisition of knowledge through the senses, his mental and physical powers being developed simultaneously.

The strongest objection which has been urged against what have by some been called the "new methods" is that the teacher is expected to teach a highly interesting lesson to ten children and at the same time supervise thirty or forty other children at their seats. Until it can be practically shown that an average primary teacher can learn in a reasonable time how to do this without imperilling her health, the onward march of these methods must be necessarily slow.

In grades of not more than forty children this objection is entirely overcome by adopting suitable busy work. In grades of more than forty children better results can be attained than by other methods, although the fact must never be overlooked that forty is the maximum for efficiency. There is room for much careful thought along the line of providing good Busy Work.

A Public School-room can be seated with Kindergarten tables and chairs at about the same expense as with ordinary desks. They are preferable to the desks for Busy Work, and in many other ways, but are apt to create noise, occasioned by the falling of pencils and the moving of tables.

It is not so difficult to find occupations which will keep children quiet as to give them *profitable* employment, and very much of the Busy Work recommended from time to time is *interesting* and nothing more.

The following kinds of Busy Work can be safely introduced into the Public School :

1.—Writing.

The materials consist of script cardboard copy, pencil, and slate or paper. It is well to rule slates on one side at least. The ruling can be done with a common ruler and an old knife. Make the small letters one-fourth inch in height, and long letters (as " f ") three spaces high, *i. e.,* five spaces long. Rule lines at the top and bottom of these long letters, but do not rule for two space letters (as " t "). Thus you will have a line one-half inch from the top of the slate, a second line a quarter of an inch below the first, a third line one-half inch below the second, a fourth line one-quarter inch below the third, and so on.

Insist upon long pencils for writing and do your best to encourage the whole arm movement and perfect position of the hand from the first.

The end to be attained is certainly worthy of persistent effort, and the results are often surprisingly satisfactory. Stencils will be found useful in showing the proper position of the hand in writing.

Do not be discouraged if the child does not take kindly to the writing at first; persevere, and at the end of a month he will like it.

Where children experience great difficulty in beginning with the whole word it is well to begin with the elementary principles, which in all cases should go hand-in-hand with the other writing and should be taken up daily with the whole class.

The paper slips on which the children write are ruled with red ink, and are $8\frac{1}{2}$ inches long by $3\frac{1}{2}$ inches wide, the ruling being similar to that of slates, thus:—

These are used mostly on Friday to send home with sample of children's writing of words learned during the week.

2.—Script and Boxes.

This consists of cardboard blocks with words and letters written on them in script, also a little box an inch each way in which each child keeps the words he has learned. Their use is explained in suggestions to Reading lessons.

3.—Cubes.

This is the fifth Kindergarten gift, and consists of twenty-seven half inch cubes; twenty-one of them are solid, three are divided diagonally into halves, and three twice diagonally into quarters.

These cubes form an almost endless variety of busy work in making forms of Beauty, Life and Knowledge.

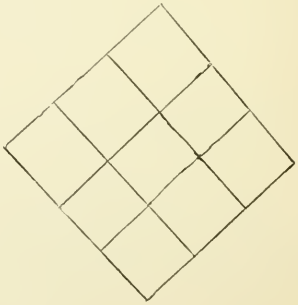
The teacher may draw a picture of the required form on the blackboard and give each child in a section a box of cubes.

After a little preliminary explanation the pupils will construct the forms without any assistance. They should be urged to invent and make new designs. The pictures may be left on the board.

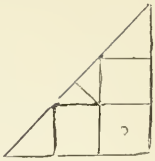
Forms of beauty are symmetrical forms, made either by repetition, or combination or by working out from a given centre, always keeping opposites alike; take for example the following sequence:—

Begin by dividing the whole gift into sections.

Place one third on the diagonal thus:



Arrange 4 triangular prisms with remaining cubes, thus:



Place these around the square prism thus:

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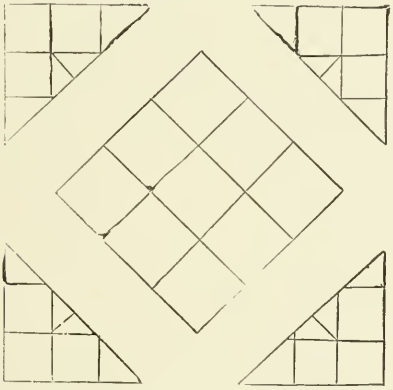

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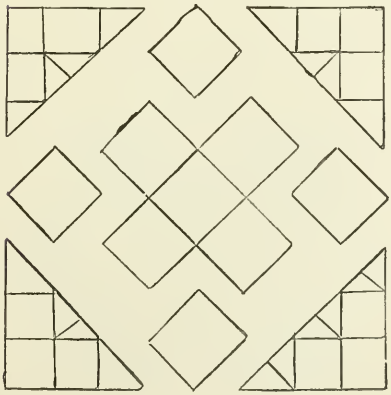

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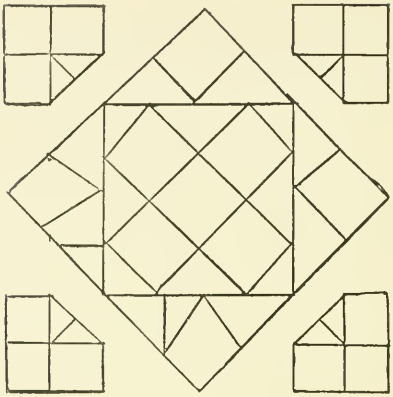

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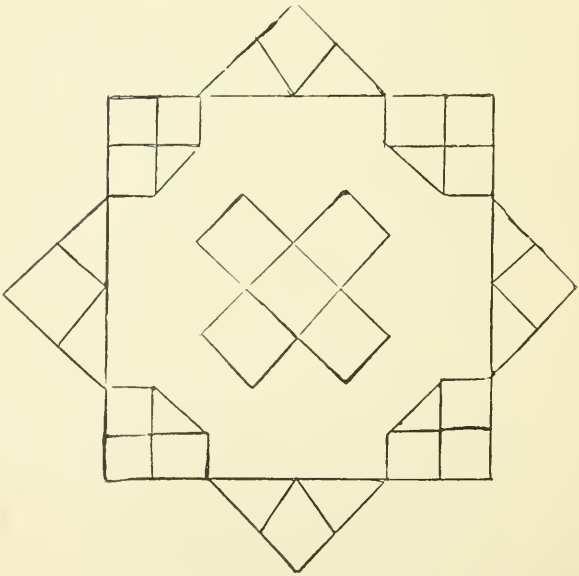

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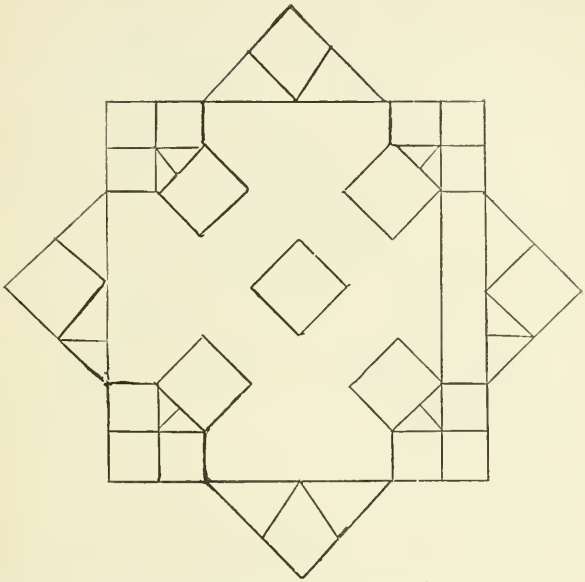
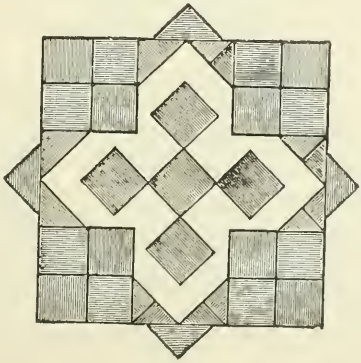


The process may be repeated by making 5.
Like No. 4. 4 like No. 3. 3 like No. 2. 2 like No. 1.
The pupil will find 6, 7 and 8 more difficult.

6



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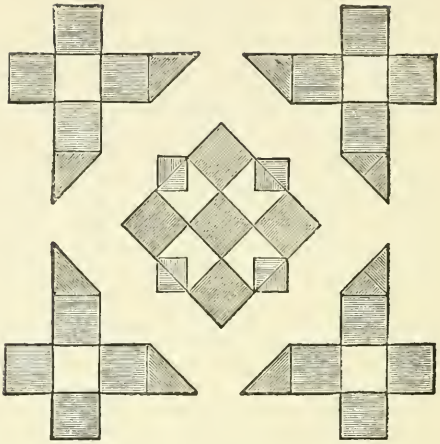

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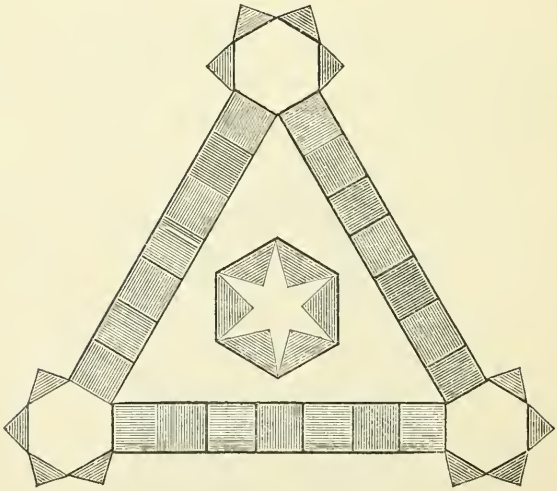

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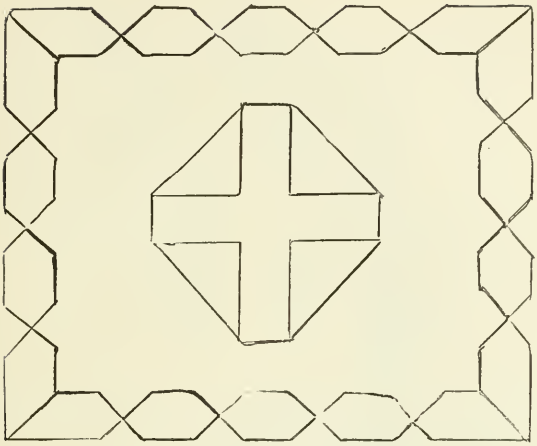

(*See* also Picture Frame, page 93).

Forms of life are objects with which the child is familiar in nature and art, as trees, birds, flowers, animals, etc., houses, furniture, monuments, archways, bridges, fences, etc.

The following afford an easy sequence in Forms of Life, beginning with the whole gift: 1, cube; 2, three steps; 3, chair; 4, house; 5, arch.

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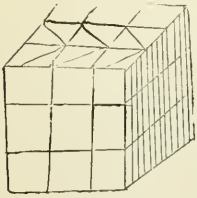

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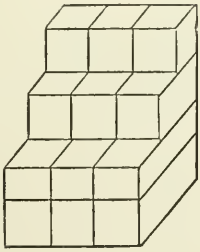

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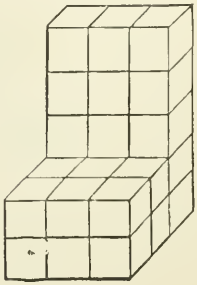

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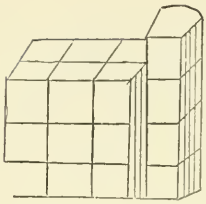

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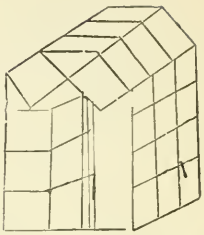
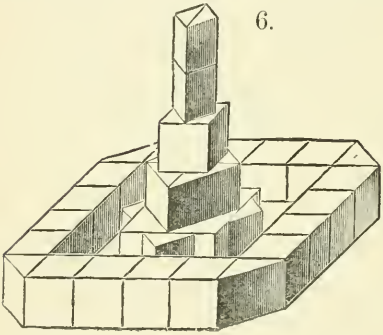


The pupil will find 6, 7, 8 and 9 more difficult.

6.



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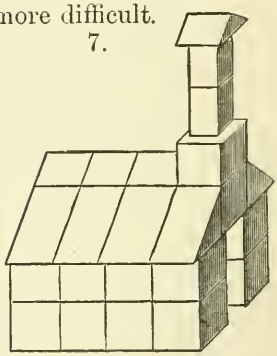

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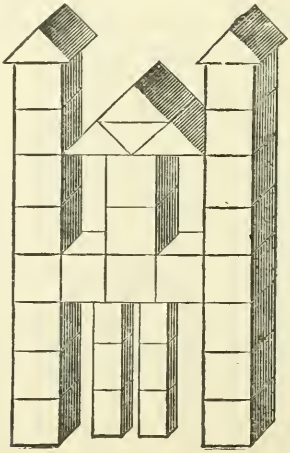

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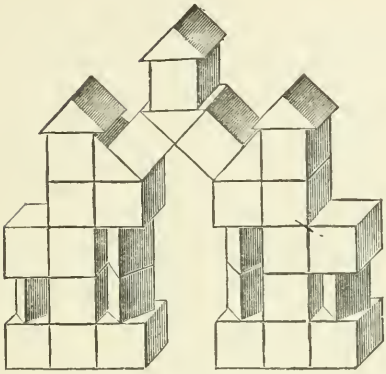


Forms of knowledge are those constructed upon a mathematical basis, and derived from numerical divisions in the gifts. All the geometric solids and planes in the gifts and occupations fall under this head.

Fifth Gift.—Numerical Lesson.

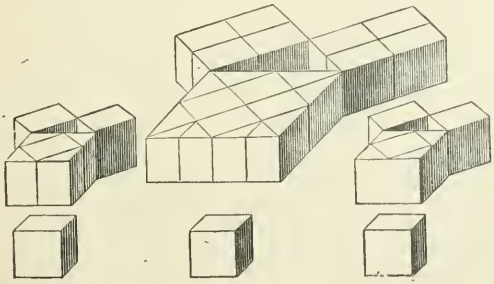
Divide cube into 3 parts horizontally.

Divide thirds into 3 parts giving 9ths.

Divide ninths into 3 parts giving 27ths.

Recombine into ninths, then into thirds.

The Pythagorean theorem may be objectively demonstrated by this gift, thus:—



4.—Slats.

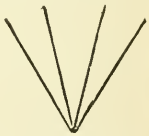
This is generally called the *tenth* gift of the Kindergarten. The slats are of wood, ten inches long and two-fifths of an inch wide. They are used for interlacing into a great many forms. The child seldom tires of the beautiful figures created by his active fancy and dexterous fingers.

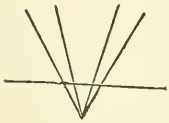
Slats of an inferior quality may be secured in bundles of about three hundred, at ten cents per bundle. The best hardwood slats, in six different colors, cost about twenty-five cents per hundred.

In assigning busy work with slats, have a number of forms drawn on the blackboard. It will be necessary to explain the method of making the combinations for a few times, then the child will discover for himself.

The following sequence for beginners is a good one :—

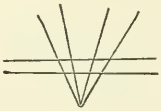
Take four slats in the left hand, thus :



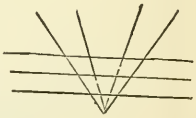


Weave one in horizontally with the right hand, thus :

Another, thus :

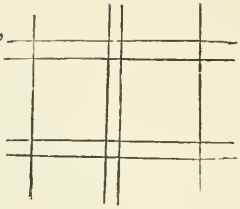


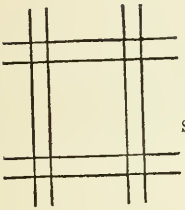
Another, thus :



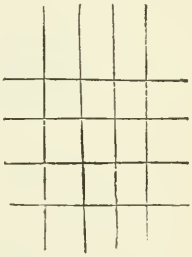
And another, thus :

Push centre vertical slats together, thus:

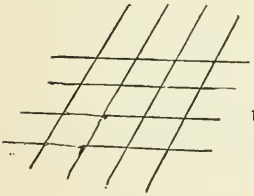




Push two vertical and two horizontal slats together, thus:



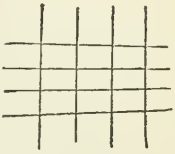
Return to window, thus:



Push diagonal corners together, thus:

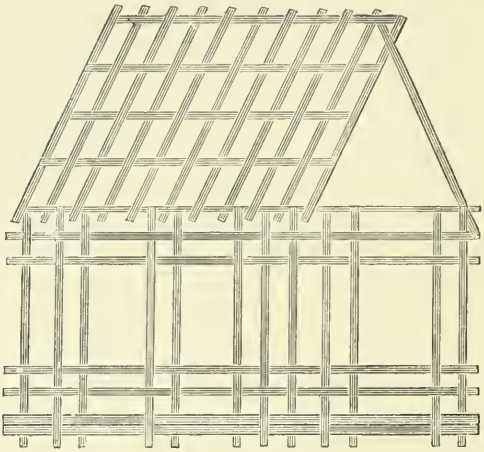
Enclosing Rhombs.

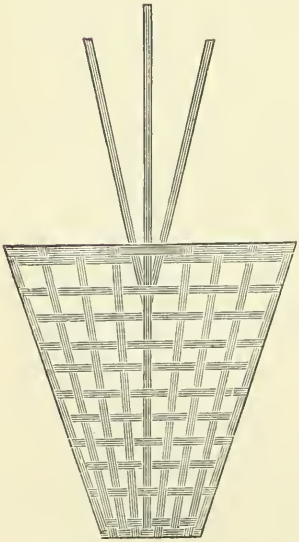
Place the last fan on the table, and move out vertical slats to form the window, thus:

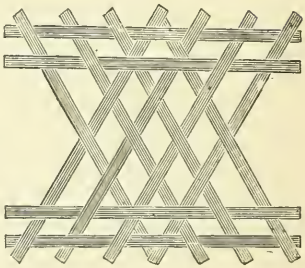


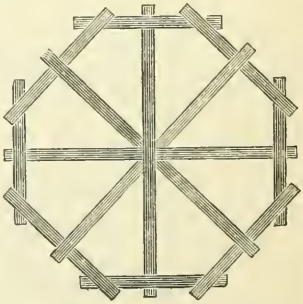
The Teacher will exercise her discretion as to the amount of such explanation she will give.

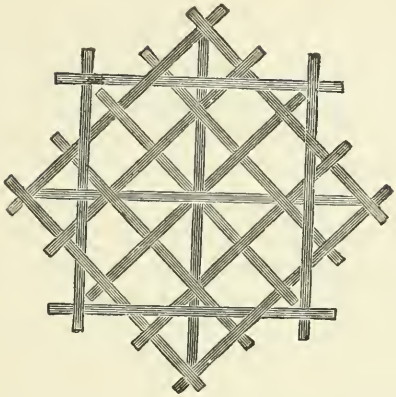
After the children have learned to manipulate the slats, they may try the following difficult combinations:—











5.—Shoe Pegs.

The material consists of common shoemaker's pegs of the *largest size*, dyed various colors.

They can be bought for five cents per quart. Diamond dyes sell for ten cents per package, sufficient to dye four quarts of pegs. The use of these pegs is explained in suggestions for number work. They are almost indispensable in primary grades.

6.—Drawing.

The materials are slate and pencil, or drawing paper and lead pencil. Drawing should occupy much of the pupil's time, as indicated in suggestions to lessons.

Children should be allowed to draw free-hand very much more than they generally are.

They should also learn to draw fearlessly. There is danger of too much of erasing of lines and drawing with rulers.

7.—Paints.

These are common water-color paints, each pupil having a box of paints and a small glass bottle with wide top containing about a cubic inch of water, also a cloth for cleaning brushes.

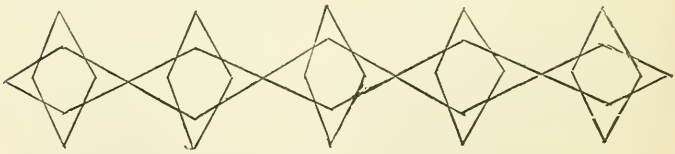
They are used in painting objects at the conclusion of natural history lessons. (*See* page 73.) The painting can be done on common drawing paper. The boxes of paints can be secured for about twenty-five cents each.

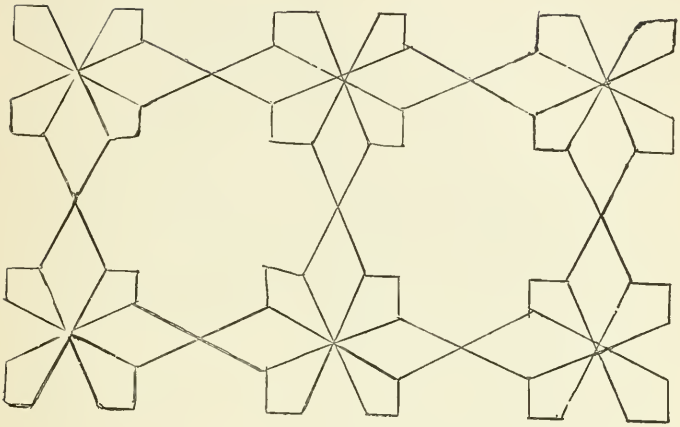
8.—Parquetry.

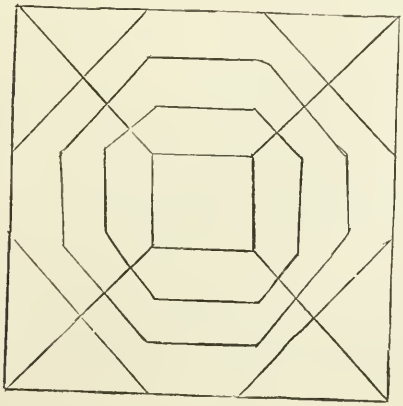
Parquetry papers, gummed on one side and colored on the other, can be used to form mosaics or artistic forms mounted on sheets of cardboard. These papers consist of squares, right-angled triangles, scalene and isosceles triangles. Children can reproduce the forms of beauty in the 5th Gift in this work, combining colors in harmony. By moistening the gummed side of the paper they adhere to the cardboard.

This forms excellent busy work but is somewhat expensive. The papers can be got as Kindergarten supplies, boxes of 1,000 costing about forty cents.

Designs similar to the following may be constructed:







9.—Clay.

This can be secured from any potter's. It may be used in moulding forms similar to objects taken up in natural science, *e. g.*, birds, etc. (*See* page 74.)

It may also be used in moulding forms taken up in object lessons, preliminary to drawing lessons.

The following sequence and hints may be helpful :—

A *Sphere* may be moulded. By additions it may be transformed into a tea-kettle, apple, cherry basket, etc.

A *Hemisphere* may be made by cutting the sphere into two equal parts. By additions it may be transformed into toad-stool, bowl, cap, etc.

A *Circle* may be illustrated by taking a plane slice from hemisphere. It may be transformed into a watch and chain in case or on a card.

Original forms may be made from these three in combination.

To Mould a Cylinder.—Make a sphere first, then lengthen it by rolling on the board, and flatten two opposite sides. Transform into a syrup pitcher, water cooler and bottle.

A *Cube* may be made from a sphere by flattening six opposite sides, giving six square flat faces, eight right corners and twelve clearly defined edges. The cube may be transformed into a house, coffee-mill, and ink-bottle. For the roof of the house, cut a cube the same size, by a diagonal line through one of its square faces. Place this triangular prism on top of the cube. Ornament accordingly.

A half cube may be made by cutting a cube perpendicularly by a line running from edge to edge. This may be transformed into bureau, washstand, table, chair, etc.

A *Square* may be illustrated by cutting a thin slice from this half cube. This may be transformed into chess-board, school-bag, etc.

The children may continue with inventions, singly or in combination, from these normal types.

10.—Sand.

It may be used for primary Geography work. Brass-moulder's sand is the best and costs but little. The sand should be kept moist but not wet. It is best used on a moulding board, but where this cannot be obtained the Teacher can improvise something. Anything from a tin pan to a common table will answer the purpose.

11.—Cards.

The pupils bring business cards or pictures to school. These are each cut into a number of pieces and placed in envelopes. One of these envelopes is given to each child, and he exercises his ingenuity in putting the puzzle together. This exercise trains the observing and inventive faculties but is not as profitable in results as the preceding kinds of busy work.

Writing.

Writing, or "talking with the pencil," is the second great means of thought expression. The sooner a child can write easily and well, the sooner he will have in his hands a means to express his *own* thoughts in an interesting and profitable way.

A child trained to the proper forms of the letters from the first will not require to spend any time correcting and changing his writing when he reaches a higher grade.

To obtain an approach to perfect handwriting from the little child requires constant watchfulness and labor. If possible, he should never be allowed to see a wrong form. In order that he should *not* see wrong forms, the teacher must be able to present an almost perfect model of writing on the board. She must be able to write rapidly as well as correctly, and this requires long practice. But it is well worth the time and labor spent on it.

The child should be given sufficient time to do his *best* work when writing, and then nothing but his *best* should be accepted. All careless work should be promptly erased and required to be re-written.

A firm, rigid drill, at first, on the proper position of body, arm, and hand, will tend to produce an easy and perfect writer afterwards. The child should sit squarely in front of the desk, the feet being placed flat on the floor.

The forearm should be kept at right angles to the writing line and should form an angle of *not less* than 90 degrees with the arm.

The pen should be held loosely between the thumb and two first fingers, the pen-holder pointing over the shoulder.

The whole arm movement should be used, exercises being conducted in it with pencils on slate or paper, in time to the teacher's counting or to music.

The child should be drilled not only on word writing, but also on the elements of the letters.

On the first day of school the children may begin by making the first principle or "one" on their slates. This furnishes profitable and entertaining busy work for the little folk before they can write anything, and also drills them on the proper slant. The pupils may be told that

the marks are little boys running, and they are in such a hurry to get away that they all lean over. Such a device will interest the children, and they will work away happily.

Proceed with the elements of the letters until all have been made. Then attempt a whole letter.

The letter "i" is an easy one to start on.

Practice this one letter until they can make it almost perfectly.

Then take the next harder, and so on until all are finished.

Do not grow discouraged. Persevere until they reach the perfect form, no matter how long it takes. You will be surprised to see what an interest the children will take in it. They will never tire as long as you do not. Search for little devices and suggestions to make the work bright, and you will soon have a class of excellent writers.

In marking slates for writing, it is a good device to sketch with colored crayon a daisy, pansy, flag, or something similar on those slates that deserve it; or you may simply write the capital "R," and for any remarkably neat slates, add "+ 1 as a reward."

SONGS AND CALISTHENICS.

The greatest objection that can be urged against primary teaching, as presented in the preceding pages is that there is danger of the child being kept in a state of high nervous tension.

The thoughtful teacher cannot fail to be impressed with the fact that as she approaches perfection in her methods of training and instruction, the child's heart

beats more quickly and his eye receives an unwonted lustre, the whole system indicating that the child is growing old too rapidly. High mental action is healthful, if not continued too long, so instead of abandoning her methods it is better to remove the objection by adopting one of two expedients: 1st, Place the child on half time, training him to work at high pressure while he works; or, 2nd, Devote the greater part of school hours to busy work, which is a mild and gentle play to the child, and to Songs and Calisthenic exercises suited to develop "a perfect physique." Where practicable, the latter is the better plan.

In teaching a new song, lead the children to talk about the subject until they become thoroughly interested.

Read the first line and have them repeat it after you, and so on with the first stanza. It is as well to teach one stanza at a time. Teach the singing by singing the first line yourself alone, and then with the children accompanying you. Be careful to check discord and insist upon pupils learning correctly what they attempt. Do not allow children to strain their voices. After they have learned the piece by heart and learned to sing it, teach the exercises, line by line.

The work must be done almost entirely by imitation.

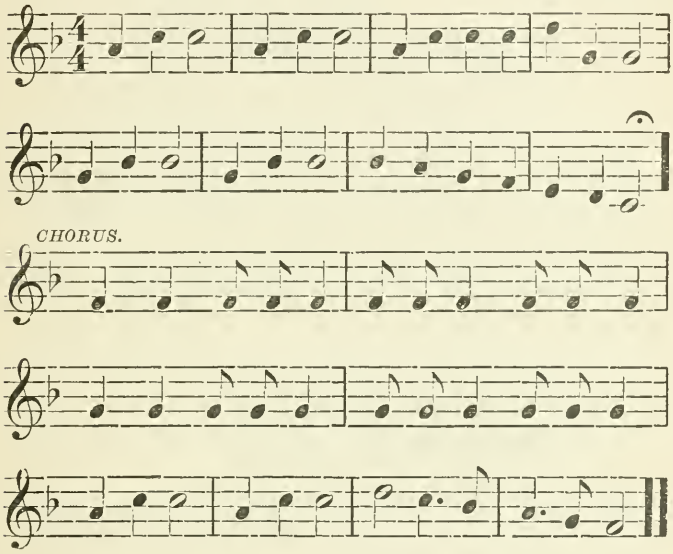
There should be some kind of musical instrument in every primary class room.

In selecting songs, be careful that the song is not so childish as to appear silly to the pupils.

The songs should also suit the time of year and day, *e. g.*, children will not sing "It is lovely May" half as heartily in December as in May.

Song.

The following is a simple song, suitable for primary grades, combining as it does, both exercise and singing:



I.

Here we stand, hand in hand,
Ready for our exercise;
Heads upright, with delight,
Sparkling in our laughing eyes.

CHORUS—Singing cheerily, cheerily, cheerily,
Clapping merrily, merrily, merrily,
One, two, three, don't you see
Where the children love to be?

The children stand in straight lines, holding each other's hands, with heads erect, and faces animated.

In the chorus, when the word "clapping" is reached,

they clap hands *softly*, four times, once on "clapping," and once on each "merrily."

II.

Right hand up, left hand up,
Twirling see our fingers go!
Folded now, let us bow,
Gently to each other, so!
Singing, etc.

In the first line the children extend first the right, and then the left hand above the head, and in second line move the fingers rapidly, with arms still extended. In third line arms are folded, and in fourth, children bow to each other, at the word "so."

III.

Eastward point, westward point,
Left hand nadir, zenith right,
Forward fold, backward fold.
Arms a-kimbo, chests upright.
Singing, etc.

In the first line the children point, with arm extended, in the directions indicated. In the second, the left hand points downward and the right upward. In the next the arms are folded in front, then behind, in the last line the hands are placed on the hips the chest being active.

IV.

Upright stand, lungs expand,
Backward make our shoulders go,
Life and health, comfort, wealth.
We can thus improve, you know.
Singing, etc.

Children stand erect, heels together, chests active, and roll shoulders backward.

V.

Now we're done, with our fun,
Let us to our work return,
Doing right gives delight,
So we will our lessons learn.

The tonic sol-fa is just the thing for children a little older, but is not used very much during the first year.

The singing of hymns in schools should not be accompanied by Calisthenic exercises.

Make the exercises attractive and give the commands in such a prompt, enthusiastic way, as to convince pupils that you like them yourself, know how to do them, and intend that they shall, too.

Exercises should combine health, recreation and culture. The motions should be neither exclusively angles nor curves. They should prepare the pupil for gesture in reading, and for a graceful bearing on the street. They can be so chosen that there will be a sequence in the movements, and yet no monotony.

DISCIPLINE AND TACTICS.

It is probable that the order of your school during the first three days will determine the nature of your order during the term. The first day is therefore a critical period in your school life. It is probably better to begin by erring on the side of sternness than on that of laxity.

Your principal objects to-day are: (*a*) To create in the child's mind a favorable impression of school and teacher. (*b*) To establish a kind of order which will daily improve.

and (*c*) To test as far as possible the relative standing of your pupils and to divide them into sections.

The last is the least important.

You must be kind as well as firm. Let the child see that school is going to be a pleasant home to him.

Every moment of the time must be *occupied,* in order that he may be diverted from that feeling of homesickness which comes over the young heart when placed amid new environments, and that he may not be led into mischief through idleness, also that you may have an opportunity to study his nature when he is not thinking about himself. It will no doubt be a long day to you, but it will be a longer one to him. Let the little teaching that you do be your very best effort, animated, earnest, hopeful and interesting, so that the child will long to come to school to-morrow and hear your voice again. It is a great mistake for the teacher to do very much talking or teaching the first day. A merchant does not put all of his goods in the window.

It will be necessary to take all the class together during the forenoon, and you must have your time-table thoroughly mapped out beforehand, so that there will be no hitch in the proceedings. You require materials for busy work more to-day than any other day of the term, and you should have them ready for distribution if possible.

Avoid assigning work too difficult for the child. It is better to run the risk of giving him work that is too easy, for nothing will discourage a child quicker during his first day than to give him a task which he has no idea how to begin to do. Study then to find such work as may be adapted both to brilliant and to dull pupils, *e. g.,* the drawing of horizontal lines.

Try to find out something of the nature of your class beforehand, the songs they know, etc. If any of your pupils have attended school before utilize them to the fullest extent.

On entering, if possible have pupils march around the room, hang up hats and take seats. If they can march to music let them do so. Be sure that the tune is one that they can keep step to, and one familiar to some of the pupils.

Perfect order having been secured, proceed with very brief opening exercises, followed by singing. If children know songs, let them sing several. Few children can resist the influence of music, and if any of the little folk feel awkward and shy, lively singing will do much to cause them to feel in harmony with their surroundings.

A class which can face and stand promptly on the word of command, is ready for work. It will be well at this juncture to begin to teach them how to do this. Give orders—ready—face—rise. On the word "ready" have pupils sit erect at end of seats, in position of attention. On the word "turn" have them turn facing the aisle, the feet being lifted noiselessly and placed in the best position for rising, the hand being placed on desk to assist in rising. On the word "rise" have children rise quietly and face front, standing in military position of attention.

Never allow pupils to stand in a hurried or disorderly manner, no matter how pressed for time you may be. If you do, your discipline will surely suffer.

Let the exercises during the first few days consist in standing, turning, marching, and other things necessary to class management. Little children were not made to

stand in straight lines. They like to do so for a short time, but cannot remain in the same position long without impairing their health.

After the preceding drill, your class are ready to begin work. Have pupils in front seats distribute busy work. See that every child has something to do and that the work has been thoroughly explained. Impress upon the pupil from the first that his *best* work is expected, and accept nothing which you are sure has cost no effort, always remembering to give a pupil credit for his *best* work, no matter how poor it may be.

In order to secure the best results the teacher must *examine* all busy work. It takes time, certainly, but you lose more by not doing it than you can make up in the time you save. Feel yourself, and let him feel that you really want that work done well. Such a command as "Now you may make figures," given in a tone of voice which the children have learned to know means, "I want to keep you working," will result in careless work which weakens the child.

Utilize every opportunity to test the relative power of the children without interfering too much with the work in hand, and grade into sections as soon as possible. Get hold of a dozen names as soon as you can. Deal with cases of discipline as they occur. When the *first* pupil leaves his seat without permission is the time for you to explain that you wish pupils to raise the right hand and receive permission before leaving their seats.

Let pupils know that all grading and seating during the first few days is only *temporary*. When children grow restless vary the exercises by songs, calisthenics, etc.

"There is a familiarity which breeds contempt" and the teacher will find it better to hold the reins pretty

tightly during the first week, if she wishes to be able to lay them down altogether after a time.

Corporal punishment should never be used except in the most extreme cases; however, if there is to be any occasion for its use, that occasion will probably arise during the first week.

Very many young teachers fail owing to an undecided, vacillating manner at the outset. You must get attention before you can educate. When you once have your class in satisfactory condition, unbend a little.

Adopt such discipline as your best judgment dictates. Do not be guided entirely by the opinion of somebody else. A system of discipline which will work like magic in the hands of one teacher may prove a complete failure in the hands of another, and *vice versa.*

If possible arrange your class so that each row of seats will contain a section. In apportioning busy work to those in seats, to be done while one section is being taught, give such Busy Work as pegs, slats, script, etc. to alternate rows, and slate work to the remaining rows. Do not collect Busy Work and re-distribute to different rows but allow pupils to change seats, *e. g.* if you have a class of fifty pupils, seated in five rows, ten in each, give first section pegs, second section slate work, third section slats, fourth section slate work, leaving fifth section to be taught.

After fifth section have had lesson and are ready for seats, let them take seats in fifth row. Then have class face and stand, so that all in one row will stand in one aisle, then allow pupils of second section to take seats in the first row, third in second, etc., leaving fifth row vacant, and first section standing; then as Busy Work has not

been collected, each section will have a change of work, and a rest in changing seats. Take first section to floor for lesson, and repeat until each section has done all the Busy Work, and had lesson, when each child will be found in his own seat. In some rooms the change may be made by the serpentine march.

In appointing monitors to distribute Busy Work, water for slates, etc., it is a good plan to ask a backward or slow pupil to do the work. It will brighten him up and make him active. If you have an especially restless pupil, such work will be an outlet for his energy. It is well to appoint monitors for a week, and the office may be made a reward for conduct, or for work, and monitors who do not strive to do their work quietly and quickly should be changed at once. The choosing of monitors, if not done very carefully, is apt to create a feeling of jealousy. Let it be distinctly understood *why* you choose a certain pupil for a certain work. If he is chosen because he can do that work well, every pupil who wishes a like honor will try to fit himself for it. Whatever plan is followed try to let no pupil feel that he is neglected or slighted in any way.

In giving commands, first see that your command is such that it can be obeyed. Give it in a firm, decided, courteous tone, and insist on its being carried out.

Let your rules be few, very few, but let every infringement of them be followed by its *natural* punishment. If your bell says "Take position," never let it say anything else, and *never* ring it unless you want *position.*

If children are told to raise the left hand when they wish to leave the room do not allow a child to pass out until he has complied with the rule, but even here you

must make exceptions for extreme cases and for children who do not yet know which is the left hand.

Never attempt to give an order with one-half of your class listening, and the other half doing something else. Get attention first, and then speak. Always speak to your pupils in your natural voice, that is, if it is a pleasant one, if not, try to make it so, and never be snappy. Be as courteous to your pupils as to your friends. If you once gain their respect and love, you will have little trouble with order.

Discriminate between noise and work, also between accidents, and intentional noises. Remember that your pupils are but human, and that accidents *will* happen.

It is not wise to forbid little children talking. Forbid their talking too much or too loudly, and you can regulate the order so as to cause no inconvenience unless you are one of those teachers who cannot teach without *perfect silence.* If you are, you must do one of two things, either educate yourself to teach with the cheerful hum of work going on, or make the little ones be still and suffer. No child will work as well in a state of repression as he will in a state of freedom, and no child can feel free who must keep his lips closed for a very long period at a time. Noise from work done should not be considered out of place. Perfect silence and earnest work are almost impossible at the same time.

Allow no whispering while teaching a lesson to the whole class, but when pupils are busy at seats allow the liberty of whispering *at times.* They will not abuse the privilege if the right spirit prevails in the school room. It is a good plan to have pupils try to work for ten or fifteen minutes at a time with lips closed.

They rather enjoy this exercise which trains them to be like grown up scholars.

If you forbid whispering, a few conscientious pupils will obey the rule. The majority of the class will probably whisper if they get the chance, always with a guilty feeling, which soon tells for evil on the character. The same children have been accustomed to talk all day long at home, with perfect freedom, then what a task it must be for them to sit for even half an hour with their lips closed.

Those who forbid all talking surely do not realize the hardship it is to obey that rule, nor the lonely, isolated feeling it gives one not to be able to communicate with one's neighbor.

Go slowly at first with little children, and try to remember how hard it is for them to learn, and how often a thing must be repeated before they remember it. Better spend two days at the beginning on one word, than be compelled to teach that word over again at the end of the term.

In all your work be patient and hopeful. Try to see things in their proper light, not in the school-room light, as we often do.

The slamming of a slate, the noise of whispering are annoyances, they are not crimes. A child is not necessarily *bad* because he does these things. He should not be looked at or spoken to as if he had committed a grave offence. Do not take all the pleasure out of a child's school life by treating him as if he were your natural enemy.

Be sympathetic with the little folk. If one of them tells you his grandma has a cat, at least *look* as if you felt an interest in that fact.

It is well to create a kind of home feeling in the school-room, and if you have only one pupil whose home is not all that could be desired, you may be giving him a few bright hours, and that is surely worth a little trouble.

Do not *govern* your pupils: help them to govern themselves.

This end will not be reached, if you make a rule for everything that goes on in your room.

Give your pupil the opportunity of exercising his power of choice, and help him to strengthen his will power. He cannot be taught too early that he alone must choose for himself the good or the evil, and abide by the result of that choice. It is possible to create such a spirit in a class, that if there be a thoroughly bad boy in it every pupil will feel it his duty to do all in his power to save that one.

Do not do your work in a hurried manner, as if you were always trying to catch up. Be energetic without being fussy.

Remember that the little people are watching and imitating you all day long; yes, and discussing you, too. Be true. Children will discover a fraud more quickly than older people, and we all know the feeling of disappointment, and loss of respect and confidence that follows such a discovery.

Do not remember a pupil's faults against him from day to day. You will foster prejudice and discourage the child.

Never scold, threaten, or lose your temper.

Private reproof is often the most effective.

Do not deal with a serious offence when it is committed but wait an hour or two. Strive to *prevent* any *open* opposition to your authority. Violent methods of discipline mar the harmony of the school-room and often, injure innocent pupils who are compelled to gaze in trembling and humiliation upon *scenes* which stamp their impress indelibly on the memory.

Take it for granted that the majority of your class are on your side, and are desirous of doing what is right.

Have a care for the physical comfort of your pupils. The temperature of a room should range from 62° to 66°. It is almost impossible to preserve order in a room below 60° or above 70°. Keep your room thoroughly ventilated. Lower windows from the top. If they have not been constructed to do this, they can be easily changed. Windows should be provided with curtains hung over a pulley at the top in such a way as to cover the lower part of the window and admit light at the upper part.

If the children's feet do not touch the floor, have seats changed, or place something under the feet.

Avoid corporal punishment. In no school-room should it be at all frequent. When used, the infliction should be in private, the instrument being a leather or rubber strap. The punishment should be inflicted on the palm of the hand. It is a good plan never to inflict such a punishment without the pupil's having first admitted his offence and the justice of his punishment. The best teachers never find it necessary to resort to corporal punishment. Children are not angels by any means, but there is a chord in the heart of every

child which can be touched by the earnest teacher, and she, who is born to teach, will find it, too, if she be left untrammelled.

With weaker disciplinarians it may be necessary at times, and it is certainly better than the nagging, cuffing, etc., which is sometimes substituted for it.

In your opening exercises be earnest, cheerful and brief. In some schools, pupils and teacher receive an impulse in the morning exercise that makes the life of each during the entire day a constant conscious approach to the Divine image, and such school-rooms are more numerous than some would have us believe.

TIME-TABLE.—JUNIOR GRADE.

The following Time-tables have been selected at random from two grades in Hamilton Schools. The teacher will make such changes and improvements as she may deem necessary.

Time.	1st Section.	2nd Section.	3rd Section.	4th Section.
9.00- 9.10	.....	Opening exercises.		
9.10- 9.25	New word	Pegs	Copy story on slates.	Splints.
9.25- 9.40	Pegs	New word	Splints	Copy story on slates.
9.40- 9.45	.....	Exercise.		
9.45-10.00	Copy story on slates.	Splints	New word	Pegs.
10.00-10.15	Splints	Copy story on slates	Pegs	New word.
10.15-10-30	.....	Tracing word with whole class on slates, distributing boxes and script word.		
10.30-10.45	.....	Recess.		
10.45-10.50	.....	Singing.		
10.50-11.05	Number lesson ..	Copy word from script	Copy word from script.	Copy word from script.
11.05-11.20	Copy word from script.	Number lesson	Copy word from script.	Copy word from script.

11.20-11.35	Copy word from script.	Copy word from script	Number lesson..	Match words into sentences.
11.35-11.50	Match words....	Match words	Match words....	Number lesson.
11.50-12.00	.....	Dismiss.		
12.00- 2.00	.....	Noon.		
2.00- 2.05	.....	Opening.		
2.05- 2.20	.....	Class drill on words, phonics, etc.		
2.20- 2.35	.....	Drawing lesson.		
2.35- 2-45	.....	Class draw lesson on slates.		
2.45- 3.00	.....	Language lesson, *e.g.*, object, color or picture lesson.		
3.00- 3.15	.....	Recess.		
3.15- 3.30	.....	Writing lesson.		
3.30- 3.40	.....	Class continue principles on slates or drill on sentences.		
3.40- 3.50	.....	Drill on number work.		
3.50- 4.00	.....	Dismiss.		

TIME-TABLE.—SENIOR GRADE.

Time.	1st Section.	2nd Section.	3rd Section.	4th Section.
9.00- 9.10	.....	Opening exercises.		
9.10- 9.25	Reading lesson.....	Copy stories.....	Pegs (Busy Work)...	Draw on slates.
9.25- 9.40	Copy stories	Reading lesson	Draw on slates.....	Pegs.
9.40- 9.45	.....	Exercise.		
9.45-10.00	Pegs.....	Draw on slates.....	Reading lesson.....	Copy stories.
10.00-10.15	Draw on slates.....	Pegs.....	Copy stories	Reading lesson.
10.15-10.30	...Writing.....	Writing lesson.	Writing	Writing
10.30-10.45	.....	Recess.		
10.45-10.50	.....	Song.		
10.50-11.00	Number lesson.....	Number work (slates)...	Number work (slates)	Number work (slates)
11.00-11.10	Number work (slates)	Number lesson	Number work (slates)	Number work (slates)
11.10-11.20	Number work (slates)	Number work (slates)...	Number lesson.....	Draw pictures of number work.
11.20-11-30	Draw pictures of number work.	Draw pictures of number work.	Draw pictures of number work.	Number lesson.
11.30-11-35	.....	Exercise.		
11.35-11-50	.....	Drawing lesson.		
11.50-12-00	.....	Dismissing.		

	12.00- 2.00	.....	Noon.		
x	2.00- 2.05	.....	Opening.		
x	2.05- 2.20	New words taught.	Splints number	Script words. copied	
x	2.20- 2.35	Copy new words.....	New words. taught..	Splints number &	Script words.
x	2.35- 2.55	Matching script words	Copy new words	New words taught.	Splints.
x	2.55- 3-05	Splints taught...	Script words formed.	Copy new words	New words.
x	3.05- 3.15	Exercise & Song.	Exercise and song.	Exercise & song	
x	3.15- 3.25	Class drill on number	Class drill on number work.	class drill on number work	
x	3.25- 3.35	Class drill on vc...	Class drill on new words, phonics, etc.	Busy work	
x	3.35- 3.40	.....	Singing.		
x	3.40- 3.50	.....	Language lesson, *e. g.*, object lesson, color lesson, picture lesson, etc.		
x	3.50- 4.00	.....	Dismissing.		

Supplies for six months for a first grade of fifty children.

——	Juniors.	Seniors.
Slates	50	
Slate pencils	600	600.
First readers		50 1st Part.
White crayon	3 boxes	2 boxes.
Colored crayon	1 box	1 box.
Sinclair's script	1 large box and 50 small boxes	
Long slats	3 bunches	1 bunch.
Short slats	2 bunches	1 bunch.
Large shoe pegs	4 qts	2 qts.
Foolscap slips	2,000	2,000.
Lead pencils	50	50.
Rulers	50	50.
B. board brushes	4	4.
Pens	1 box	1 box.

In addition to the preceding, there should be kept on hand from term to term, the following:—

(*a*) Samples of First, Second and Fifth Kindergarten Gifts.

(*b*) Twelve Primary Readers, all alike, *e. g.*, Monroe's, Sheldon's, Barnes'.

(*c*) One copy of each of the following:

Prang's Primary Drawing.
Calkin's Object Lessons.
Elementary Lessons in English, Teachers' Edition.
Wentworth and Reid's Arithmetic.

BOOKS FOR PRIMARY TEACHER.

The Primary Teacher in preparing lessons, constantly requires books of reference, and should have a well-stored library.

The following list is submitted as a help in making selections :—

Drawing Lessons, Prang; Arith., Wentworth and Reed; Arith., Appleton; Art of School Management, Baldwin; Physical Culture, Houghton; Mistakes in Teaching, Hughes; Art of Securing Attention, Hughes; From Cradle to School, Meyer; Four Lectures on Early Child Culture, Hailmann: Principles and Practice of Teaching, Johonnot; Unconscious Tuition, Huntington; Leonard and Gertrude, Pestallozzi; Education of Man, Frœbel; Development Lessons, De Graff; Manual for Teachers, Sheldon; Lectures on Education, Joseph Payne; Quincy Methods, Lelia Patridge; Practical Teacher, Col. Parker; Principles and Practice of Education, McLellan; Education by Doing, Annah Johnson; First Three Years of Child Life, Perez; Object Lessons, Calkin; Object Lessons, Sheldon; Kindergarten Guide, Madame Krauss; Kindergarten Songs, Mrs. Hubbard; Elocution, Mrs. Shoemaker; Little Friends in Feathers and Fur, Johonnot; Claws and Hoofs; Wings and Fins; Stories about Cats, Mrs. Surr; Fairyland of Science, Arabella Buckley; Life and her Children; Natural History for Little Folks' Series, Bees, Butterflies, etc., Mrs. Sanborn Ternay; Greek Heroes, Charles Kingsley; Water Babies; Madame What and Lady Why; Seven Little Sisters, Jane Andrews; Ten Boys on the Road from Long Ago to Now; Little Lord Fauntleroy, Frances Hodgson Burnet; Hawthorne's Wonder Book.